

Clemente Capasso

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1,363 papers	71,124 citations	126 h-index	197 g-index
1,403 ext. papers	77,848 ext. citations	5.2 avg, IF	8.87 L-index

#	Paper	IF	Citations
1363	Carbonic anhydrases: novel therapeutic applications for inhibitors and activators. <i>Nature Reviews Drug Discovery</i> , 2008 , 7, 168-81	64.1	2297
1362	Interfering with pH regulation in tumours as a therapeutic strategy. <i>Nature Reviews Drug Discovery</i> , 2011 , 10, 767-77	64.1	1146
1361	Carbonic anhydrase inhibitors. <i>Medicinal Research Reviews</i> , 2003 , 23, 146-89	14.4	1062
1360	Multiple binding modes of inhibitors to carbonic anhydrases: how to design specific drugs targeting 15 different isoforms?. <i>Chemical Reviews</i> , 2012 , 112, 4421-68	68.1	889
1359	Targeting tumor hypoxia: suppression of breast tumor growth and metastasis by novel carbonic anhydrase IX inhibitors. <i>Cancer Research</i> , 2011 , 71, 3364-76	10.1	563
1358	Anticancer and antiviral sulfonamides. <i>Current Medicinal Chemistry</i> , 2003 , 10, 925-53	4.3	557
1357	Hypoxia activates the capacity of tumor-associated carbonic anhydrase IX to acidify extracellular pH. <i>FEBS Letters</i> , 2004 , 577, 439-45	3.8	556
1356	Carbonic anhydrase inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010 , 20, 3467-74	2.9	538
1355	Carbonic anhydrases: current state of the art, therapeutic applications and future prospects. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2004 , 19, 199-229	5.6	532
1354	Structure and function of carbonic anhydrases. <i>Biochemical Journal</i> , 2016 , 473, 2023-32	3.8	524
1353	Natural products in drug discovery: advances and opportunities. <i>Nature Reviews Drug Discovery</i> , 2021 , 20, 200-216	64.1	522
1352	How many carbonic anhydrase inhibition mechanisms exist?. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 345-60	5.6	485
1351	Structure-based drug discovery of carbonic anhydrase inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2012 , 27, 759-72	5.6	483
1350	Carbonic anhydrases as targets for medicinal chemistry. <i>Bioorganic and Medicinal Chemistry</i> , 2007 , 15, 4336-50	3.4	462
1349	Non-zinc mediated inhibition of carbonic anhydrases: coumarins are a new class of suicide inhibitors. <i>Journal of the American Chemical Society</i> , 2009 , 131, 3057-62	16.4	400
1348	Crystal structure of the catalytic domain of the tumor-associated human carbonic anhydrase IX. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 16233-8	11.5	399
1347	Carbonic anhydrases--an overview. <i>Current Pharmaceutical Design</i> , 2008 , 14, 603-14	3.3	397

1346	Ureido-substituted benzenesulfonamides potently inhibit carbonic anhydrase IX and show antimetastatic activity in a model of breast cancer metastasis. <i>Journal of Medicinal Chemistry</i> , 2011 , 54, 1896-902	8.3	391
1345	Unexpected nanomolar inhibition of carbonic anhydrase by COX-2-selective celecoxib: new pharmacological opportunities due to related binding site recognition. <i>Journal of Medicinal Chemistry</i> , 2004 , 47, 550-7	8.3	381
1344	Recent developments in targeting carbonic anhydrase IX for cancer therapeutics. <i>Oncotarget</i> , 2012 , 3, 84-97	3.3	325
1343	Targeting tumor-associated carbonic anhydrase IX in cancer therapy. <i>Trends in Pharmacological Sciences</i> , 2006 , 27, 566-73	13.2	321
1342	Protease inhibitors of the sulfonamide type: anticancer, antiinflammatory, and antiviral agents. <i>Medicinal Research Reviews</i> , 2003 , 23, 535-58	14.4	320
1341	Deciphering the mechanism of carbonic anhydrase inhibition with coumarins and thiocoumarins. <i>Journal of Medicinal Chemistry</i> , 2010 , 53, 335-44	8.3	311
1340	Advances in structure-based drug discovery of carbonic anhydrase inhibitors. <i>Expert Opinion on Drug Discovery</i> , 2017 , 12, 61-88	6.2	298
1339	An overview of the alpha-, beta- and gamma-carbonic anhydrases from Bacteria: can bacterial carbonic anhydrases shed new light on evolution of bacteria?. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 325-32	5.6	279
1338	Discovery of a new family of carbonic anhydrases in the malaria pathogen Plasmodium falciparum--the E-carbonic anhydrases. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014 , 24, 4389-4396	2.9	258
1337	Carbonic anhydrase inhibitors. Synthesis of water-soluble, topically effective, intraocular pressure-lowering aromatic/heterocyclic sulfonamides containing cationic or anionic moieties: is the tail more important than the ring?. <i>Journal of Medicinal Chemistry</i> , 1999 , 42, 2641-50	8.3	250
1336	Carbonic anhydrase activators: X-ray crystallographic and spectroscopic investigations for the interaction of isozymes I and II with histamine. <i>Biochemistry</i> , 1997 , 36, 10384-92	3.2	246
1335	Carbonic anhydrase inhibitors and activators for novel therapeutic applications. <i>Future Medicinal Chemistry</i> , 2011 , 3, 1165-80	4.1	240
1334	Carbonic anhydrase inhibitors: E7070, a sulfonamide anticancer agent, potently inhibits cytosolic isozymes I and II, and transmembrane, tumor-associated isozyme IX. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2004 , 14, 217-23	2.9	235
1333	Antiglaucoma carbonic anhydrase inhibitors: a patent review. <i>Expert Opinion on Therapeutic Patents</i> , 2013 , 23, 705-16	6.8	232
1332	Applications of carbonic anhydrase inhibitors and activators in therapy. <i>Expert Opinion on Therapeutic Patents</i> , 2002 , 12, 217-242	6.8	228
1331	Biochemical characterization of CA IX, one of the most active carbonic anhydrase isozymes. <i>Journal of Biological Chemistry</i> , 2008 , 283, 27799-27809	5.4	224
1330	Diuretics with carbonic anhydrase inhibitory action: a patent and literature review (2005 - 2013). <i>Expert Opinion on Therapeutic Patents</i> , 2013 , 23, 681-91	6.8	218
1329	The role of carbonic anhydrase 9 in regulating extracellular and intracellular pH in three-dimensional tumor cell growths. <i>Journal of Biological Chemistry</i> , 2009 , 284, 20299-310	5.4	218

1328	Exploiting the hydrophobic and hydrophilic binding sites for designing carbonic anhydrase inhibitors. <i>Expert Opinion on Drug Discovery</i> , 2013 , 8, 793-810	6.2	215
1327	Antiobesity carbonic anhydrase inhibitors: a literature and patent review. <i>Expert Opinion on Therapeutic Patents</i> , 2013 , 23, 725-35	6.8	213
1326	Sulfa and trimethoprim-like drugs - antimetabolites acting as carbonic anhydrase, dihydropteroate synthase and dihydrofolate reductase inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2014 , 29, 379-87	5.6	212
1325	A small-molecule drug conjugate for the treatment of carbonic anhydrase IX expressing tumors. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 4231-5	16.4	210
1324	Carbonic anhydrase inhibitors: SAR and X-ray crystallographic study for the interaction of sugar sulfamates/sulfamides with isozymes I, II and IV. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2003 , 13, 841-5	2.9	209
1323	Anticancer carbonic anhydrase inhibitors: a patent review (2008 - 2013). <i>Expert Opinion on Therapeutic Patents</i> , 2013 , 23, 737-49	6.8	208
1322	Glycosyl coumarin carbonic anhydrase IX and XII inhibitors strongly attenuate the growth of primary breast tumors. <i>Journal of Medicinal Chemistry</i> , 2011 , 54, 8271-7	8.3	201
1321	Bacterial carbonic anhydrases as drug targets: toward novel antibiotics?. <i>Frontiers in Pharmacology</i> , 2011 , 2, 34	5.6	201
1320	Carbonic anhydrase inhibitors. Inhibition of the transmembrane isozyme XII with sulfonamides-a new target for the design of antitumor and antiglaucoma drugs?. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2005 , 15, 963-9	2.9	199
1319	Highly active antiretroviral therapy: current state of the art, new agents and their pharmacological interactions useful for improving therapeutic outcome. <i>Current Pharmaceutical Design</i> , 2005 , 11, 1805-43	3.3	199
1318	Dithiocarbamates strongly inhibit carbonic anhydrases and show antiglaucoma action in vivo. <i>Journal of Medicinal Chemistry</i> , 2012 , 55, 1721-30	8.3	195
1317	Carbonic anhydrase inhibitors. Inhibition of human erythrocyte isozymes I and II with a series of antioxidant phenols. <i>Bioorganic and Medicinal Chemistry</i> , 2009 , 17, 3207-11	3.4	194
1316	Diuretics: from classical carbonic anhydrase inhibitors to novel applications of the sulfonamides. <i>Current Pharmaceutical Design</i> , 2008 , 14, 641-8	3.3	194
1315	Anti-infective carbonic anhydrase inhibitors: a patent and literature review. <i>Expert Opinion on Therapeutic Patents</i> , 2013 , 23, 693-704	6.8	192
1314	Carbonic anhydrase in the scleractinian coral <i>Stylophora pistillata</i> : characterization, localization, and role in biomineralization. <i>Journal of Biological Chemistry</i> , 2008 , 283, 25475-25484	5.4	192
1313	Carbonic anhydrase inhibitors. Design of fluorescent sulfonamides as probes of tumor-associated carbonic anhydrase IX that inhibit isozyme IX-mediated acidification of hypoxic tumors. <i>Journal of Medicinal Chemistry</i> , 2005 , 48, 4834-41	8.3	192
1312	Carbonic anhydrase inhibitors. Inhibition of mammalian isoforms I-XIV with a series of natural product polyphenols and phenolic acids. <i>Bioorganic and Medicinal Chemistry</i> , 2010 , 18, 2159-2164	3.4	190
1311	Characterization of CA XIII, a novel member of the carbonic anhydrase isozyme family. <i>Journal of Biological Chemistry</i> , 2004 , 279, 2719-27	5.4	187

1310	Carbonic anhydrase inhibitors: X-ray and molecular modeling study for the interaction of a fluorescent antitumor sulfonamide with isozyme II and IX. <i>Journal of the American Chemical Society</i> , 2006 , 128, 8329-35	16.4	186
1309	Polyamines inhibit carbonic anhydrases by anchoring to the zinc-coordinated water molecule. <i>Journal of Medicinal Chemistry</i> , 2010 , 53, 5511-22	8.3	184
1308	Selective hydrophobic pocket binding observed within the carbonic anhydrase II active site accommodate different 4-substituted-ureido-benzenesulfonamides and correlate to inhibitor potency. <i>Chemical Communications</i> , 2010 , 46, 8371-3	5.8	180
1307	The Warburg Effect and the Hallmarks of Cancer. <i>Anti-Cancer Agents in Medicinal Chemistry</i> , 2017 , 17, 164-170	2.2	179
1306	Carbonic anhydrase inhibitors as anticonvulsant agents. <i>Current Topics in Medicinal Chemistry</i> , 2007 , 7, 855-64	3	178
1305	Structure and inhibition of the CO ₂ -sensing carbonic anhydrase Can2 from the pathogenic fungus <i>Cryptococcus neoformans</i> . <i>Journal of Molecular Biology</i> , 2009 , 385, 1207-20	6.5	176
1304	The alpha and beta classes carbonic anhydrases from <i>Helicobacter pylori</i> as novel drug targets. <i>Current Pharmaceutical Design</i> , 2008 , 14, 622-30	3.3	175
1303	Sulfocoumarins (1,2-benzoxathiine-2,2-dioxides): a class of potent and isoform-selective inhibitors of tumor-associated carbonic anhydrases. <i>Journal of Medicinal Chemistry</i> , 2013 , 56, 293-300	8.3	174
1302	(In)organic anions as carbonic anhydrase inhibitors. <i>Journal of Inorganic Biochemistry</i> , 2012 , 111, 117-29	4.2	173
1301	Imaging of CA IX with fluorescent labelled sulfonamides distinguishes hypoxic and (re)-oxygenated cells in a xenograft tumour model. <i>Radiotherapy and Oncology</i> , 2009 , 92, 423-8	5.3	173
1300	Tumor-associated carbonic anhydrase 9 spatially coordinates intracellular pH in three-dimensional multicellular growths. <i>Journal of Biological Chemistry</i> , 2008 , 283, 20473-83	5.4	172
1299	Carbonic anhydrases as drug targets--an overview. <i>Current Topics in Medicinal Chemistry</i> , 2007 , 7, 825-33	3	171
1298	Carbonic anhydrase inhibitors: interactions of phenols with the 12 catalytically active mammalian isoforms (CA I-XIV). <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008 , 18, 1583-7	2.9	170
1297	Carbonic anhydrase inhibitors: inhibition of isozymes I, II, and IX with triazole-linked O-glycosides of benzene sulfonamides. <i>Journal of Medicinal Chemistry</i> , 2007 , 50, 1651-7	8.3	169
1296	Sulfamates and their therapeutic potential. <i>Medicinal Research Reviews</i> , 2005 , 25, 186-228	14.4	169
1295	Sulfonamides: a patent review (2008 - 2012). <i>Expert Opinion on Therapeutic Patents</i> , 2012 , 22, 747-58	6.8	167
1294	Carbonic anhydrase inhibitors. Zonisamide is an effective inhibitor of the cytosolic isozyme II and mitochondrial isozyme V: solution and X-ray crystallographic studies. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2005 , 15, 2315-20	2.9	166
1293	Synthesis and carbonic anhydrase isoenzymes I, II, IX, and XII inhibitory effects of dimethoxybromophenol derivatives incorporating cyclopropane moieties. <i>Journal of Medicinal Chemistry</i> , 2015 , 58, 640-50	8.3	164

1292	Carbonic anhydrase inhibitors. The mitochondrial isozyme VB as a new target for sulfonamide and sulfamate inhibitors. <i>Journal of Medicinal Chemistry</i> , 2005 , 48, 7860-6	8.3	161
1291	Inhibition of carbonic anhydrase IX targets primary tumors, metastases, and cancer stem cells: Three for the price of one. <i>Medicinal Research Reviews</i> , 2018 , 38, 1799-1836	14.4	159
1290	In vitro inhibition of carbonic anhydrase isozymes by some phenolic compounds. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011 , 21, 4259-62	2.9	158
1289	In Vitro inhibition of human carbonic anhydrase I and II isozymes with natural phenolic compounds. <i>Chemical Biology and Drug Design</i> , 2011 , 77, 494-9	2.9	154
1288	Bacterial, fungal and protozoan carbonic anhydrases as drug targets. <i>Expert Opinion on Therapeutic Targets</i> , 2015 , 19, 1689-704	6.4	153
1287	Taking advantage of tumor cell adaptations to hypoxia for developing new tumor markers and treatment strategies. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2009 , 24 Suppl 1, 1-39	5.6	153
1286	Therapeutic potential of sulfamides as enzyme inhibitors. <i>Medicinal Research Reviews</i> , 2006 , 26, 767-92	14.4	153
1285	A novel class of carbonic anhydrase inhibitors: glycoconjugate benzene sulfonamides prepared by "click-tailing". <i>Journal of Medicinal Chemistry</i> , 2006 , 49, 6539-48	8.3	153
1284	Carbonic Anhydrase Inhibition and the Management of Hypoxic Tumors. <i>Metabolites</i> , 2017 , 7,	5.6	151
1283	Carbonic anhydrase IX: Biochemical and crystallographic characterization of a novel antitumor target. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2010 , 1804, 404-9	4	151
1282	Carbonic anhydrase inhibitors: stacking with Phe131 determines active site binding region of inhibitors as exemplified by the X-ray crystal structure of a membrane-impermeant antitumor sulfonamide complexed with isozyme II. <i>Journal of Medicinal Chemistry</i> , 2005 , 48, 5721-7	8.3	150
1281	Dithiocarbamates: a new class of carbonic anhydrase inhibitors. Crystallographic and kinetic investigations. <i>Chemical Communications</i> , 2012 , 48, 1868-70	5.8	149
1280	Modulation of carbonic anhydrase activity and its applications in therapy. <i>Expert Opinion on Therapeutic Patents</i> , 2004 , 14, 667-702	6.8	148
1279	Carbonic anhydrase inhibitors: synthesis of water-soluble, topically effective intraocular pressure lowering aromatic/heterocyclic sulfonamides containing 8-quinoline-sulfonyl moieties: is the tail more important than the ring?. <i>Bioorganic and Medicinal Chemistry</i> , 1999 , 7, 2397-406	3.4	148
1278	Carbonic anhydrase inhibitors: the beta-carbonic anhydrase from <i>Helicobacter pylori</i> is a new target for sulfonamide and sulfamate inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2007 , 17, 3585-94	2.9	146
1277	Indisulam: an anticancer sulfonamide in clinical development. <i>Expert Opinion on Investigational Drugs</i> , 2003 , 12, 283-7	5.9	146
1276	Carbonic anhydrase inhibitors: synthesis of water-soluble, aminoacyl/dipeptidyl sulfonamides possessing long-lasting intraocular pressure-lowering properties via the topical route. <i>Journal of Medicinal Chemistry</i> , 1999 , 42, 3690-700	8.3	146
1275	Saccharin inhibits carbonic anhydrases: possible explanation for its unpleasant metallic aftertaste. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 7697-9	16.4	145

1274	Carbonic anhydrase inhibitors. Design of selective, membrane-impermeant inhibitors targeting the human tumor-associated isozyme IX. <i>Journal of Medicinal Chemistry</i> , 2004 , 47, 2337-47	8.3	145
1273	Specific inhibition of carbonic anhydrase IX activity enhances the in vivo therapeutic effect of tumor irradiation. <i>Radiotherapy and Oncology</i> , 2011 , 99, 424-31	5.3	144
1272	Nonaromatic sulfonamide group as an ideal anchor for potent human carbonic anhydrase inhibitors: role of hydrogen-bonding networks in ligand binding and drug design. <i>Journal of Medicinal Chemistry</i> , 2002 , 45, 3583-7	8.3	144
1271	7,8-disubstituted- but not 6,7-disubstituted coumarins selectively inhibit the transmembrane, tumor-associated carbonic anhydrase isoforms IX and XII over the cytosolic ones I and II in the low nanomolar/subnanomolar range. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010 , 20, 7255-8	2.9	143
1270	Carbonic anhydrase inhibitors and activators and their use in therapy. <i>Expert Opinion on Therapeutic Patents</i> , 2006 , 16, 1627-1664	6.8	143
1269	New strategies for targeting the hypoxic tumour microenvironment in breast cancer. <i>Cancer Treatment Reviews</i> , 2013 , 39, 171-9	14.4	142
1268	In vitro inhibition of salicylic acid derivatives on human cytosolic carbonic anhydrase isozymes I and II. <i>Bioorganic and Medicinal Chemistry</i> , 2008 , 16, 9101-5	3.4	142
1267	Carbonic anhydrase inhibitors: clash with Ala65 as a means for designing inhibitors with low affinity for the ubiquitous isozyme II, exemplified by the crystal structure of the topiramate sulfamide analogue. <i>Journal of Medicinal Chemistry</i> , 2006 , 49, 7024-31	8.3	142
1266	Direct extracellular interaction between carbonic anhydrase IV and the human NBC1 sodium/bicarbonate co-transporter. <i>Biochemistry</i> , 2003 , 42, 12321-9	3.2	142
1265	Carbonic anhydrase inhibitors: the first selective, membrane-impermeant inhibitors targeting the tumor-associated isozyme IX. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2004 , 14, 869-73	2.9	140
1264	Carbonic anhydrase inhibitors - Part 49: Synthesis of substituted ureido and thioureido derivatives of aromatic/heterocyclic sulfonamides with increased affinities for isozyme I. <i>European Journal of Medicinal Chemistry</i> , 1998 , 33, 83-93	6.8	139
1263	Carbonic anhydrase inhibitors as emerging drugs for the treatment of obesity. <i>Expert Opinion on Emerging Drugs</i> , 2008 , 13, 383-92	3.7	139
1262	Carbonic anhydrase inhibitors as emerging agents for the treatment and imaging of hypoxic tumors. <i>Expert Opinion on Investigational Drugs</i> , 2018 , 27, 963-970	5.9	139
1261	A new approach to antiglaucoma drugs: carbonic anhydrase inhibitors with or without NO donating moieties. Mechanism of action and preliminary pharmacology. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2012 , 27, 138-47	5.6	138
1260	Imaging the hypoxia surrogate marker CA IX requires expression and catalytic activity for binding fluorescent sulfonamide inhibitors. <i>Radiotherapy and Oncology</i> , 2007 , 83, 367-73	5.3	138
1259	Carbonic anhydrases in anthozoan corals-A review. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 1437-50	5.4	137
1258	Are carbonic anhydrase inhibitors suitable for obtaining antiobesity drugs?. <i>Current Pharmaceutical Design</i> , 2008 , 14, 655-60	3.3	137
1257	Carbonic anhydrase inhibitors: DNA cloning and inhibition studies of the alpha-carbonic anhydrase from <i>Helicobacter pylori</i> , a new target for developing sulfonamide and sulfamate gastric drugs. <i>Journal of Medicinal Chemistry</i> , 2006 , 49, 2117-26	8.3	137

1256	Carbonic anhydrase inhibitors: X-ray crystallographic structure of the adduct of human isozyme II with EMATE, a dual inhibitor of carbonic anhydrases and steroid sulfatase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2004 , 14, 231-4	2.9	137
1255	Carbonic anhydrase inhibitors: water-soluble 4-sulfamoylphenylthioureas as topical intraocular pressure-lowering agents with long-lasting effects. <i>Journal of Medicinal Chemistry</i> , 2000 , 43, 4884-92	8.3	137
1254	The Eclass carbonic anhydrases as drug targets for antimalarial agents. <i>Expert Opinion on Therapeutic Targets</i> , 2015 , 19, 551-63	6.4	135
1253	Carbonic anhydrase inhibitors. Antioxidant polyphenols effectively inhibit mammalian isoforms I-XV. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010 , 20, 5050-3	2.9	135
1252	Carbonic anhydrase inhibitors in the treatment and prophylaxis of obesity. <i>Expert Opinion on Therapeutic Patents</i> , 2003 , 13, 1545-1550	6.8	135
1251	Rosmarinic acid inhibits some metabolic enzymes including glutathione S-transferase, lactoperoxidase, acetylcholinesterase, butyrylcholinesterase and carbonic anhydrase isoenzymes. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1698-702	5.6	134
1250	Sulfonamides and their isosters as carbonic anhydrase inhibitors. <i>Future Medicinal Chemistry</i> , 2014 , 6, 1149-65	4.1	133
1249	Carbonic anhydrase inhibitors. Inhibition of tumor-associated isozyme IX by halogenosulfanilamide and halogenophenylaminobenzolamide derivatives. <i>Journal of Medicinal Chemistry</i> , 2003 , 46, 2187-96	8.3	133
1248	Carbonic anhydrase inhibitors [Part 29 1: Interaction of isozymes I, II and IV with benzolamide-like derivatives. <i>European Journal of Medicinal Chemistry</i> , 1998 , 33, 739-751	6.8	130
1247	Metal binding and antibacterial activity of ciprofloxacin complexes. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2005 , 20, 303-7	5.6	130
1246	Zinc complexes of benzothiazole-derived Schiff bases with antibacterial activity. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2003 , 18, 259-63	5.6	130
1245	Carbonic anhydrase inhibitors: anticonvulsant sulfonamides incorporating valproyl and other lipophilic moieties. <i>Journal of Medicinal Chemistry</i> , 2002 , 45, 312-20	8.3	129
1244	Carbonic anhydrase inhibitors: novel sulfonamides incorporating 1,3,5-triazine moieties as inhibitors of the cytosolic and tumour-associated carbonic anhydrase isozymes I, II and IX. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2005 , 15, 3102-8	2.9	129
1243	N-Acylsulfonamides strongly inhibit human carbonic anhydrase isoenzymes I and II. <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 2598-605	3.4	128
1242	Bacterial protease inhibitors. <i>Medicinal Research Reviews</i> , 2002 , 22, 329-72	14.4	128
1241	Carbonic anhydrase inhibitors. Inhibition of the human cytosolic isozyme VII with aromatic and heterocyclic sulfonamides. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2005 , 15, 971-6	2.9	128
1240	Carbonic anhydrase inhibitors: perfluoroalkyl/aryl-substituted derivatives of aromatic/heterocyclic sulfonamides as topical intraocular pressure-lowering agents with prolonged duration of action. <i>Journal of Medicinal Chemistry</i> , 2000 , 43, 4542-51	8.3	128
1239	Carbonic anhydrase inhibitors. A general approach for the preparation of water-soluble sulfonamides incorporating polyamino-polycarboxylate tails and of their metal complexes possessing long-lasting, topical intraocular pressure-lowering properties. <i>Journal of Medicinal Chemistry</i> , 2002 , 45, 1466-76	8.3	127

1238	Carbonic anhydrase inhibitors: inhibition of the transmembrane isozyme XIV with sulfonamides. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2005 , 15, 3828-33	2.9	125
1237	Metal-Based Antibacterial and Antifungal Agents: Synthesis, Characterization, and In Vitro Biological Evaluation of Co(II), Cu(II), Ni(II), and Zn(II) Complexes With Amino Acid-Derived Compounds. <i>Bioinorganic Chemistry and Applications</i> , 2006 , 2006, 83131	4.2	124
1236	Antimetastatic effect of sulfamate carbonic anhydrase IX inhibitors in breast carcinoma xenografts. <i>Journal of Medicinal Chemistry</i> , 2012 , 55, 5591-600	8.3	123
1235	Carbonic anhydrase activators. Activation of isozymes I, II, IV, VA, VII, and XIV with L- and D-histidine and crystallographic analysis of their adducts with isoform II: engineering proton-transfer processes within the active site of an enzyme. <i>Chemistry - A European Journal</i> , 2006 , 12, 7057-66	4.8	122
1234	Carbonic anhydrase inhibitors as antitumor/antimetastatic agents: a patent review (2008-2018). <i>Expert Opinion on Therapeutic Patents</i> , 2018 , 28, 729-740	6.8	121
1233	Carbonic anhydrase inhibitors [Part 52. Metal complexes of heterocyclic sulfonamides: A new class of strong topical intraocular pressure-lowering agents in rabbits. <i>European Journal of Medicinal Chemistry</i> , 1998 , 33, 247-254	6.8	120
1232	Discovery of potent carbonic anhydrase and acetylcholine esterase inhibitors: novel sulfamoylcarbamates and sulfamides derived from acetophenones. <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 3592-602	3.4	119
1231	Dithiocarbamates strongly inhibit the class carbonic anhydrases from Mycobacterium tuberculosis. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2013 , 28, 407-11	5.6	118
1230	Coumarins incorporating hydroxy- and chloro-moieties selectively inhibit the transmembrane, tumor-associated carbonic anhydrase isoforms IX and XII over the cytosolic ones I and II. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010 , 20, 4511-4	2.9	118
1229	An Overview of the Bacterial Carbonic Anhydrases. <i>Metabolites</i> , 2017 , 7,	5.6	117
1228	Selection of Carbonic Anhydrase IX Inhibitors from One Million DNA-Encoded Compounds. <i>ACS Chemical Biology</i> , 2011 , 6, 336-44	4.9	117
1227	Biomimetic CO ₂ capture using a highly thermostable bacterial carbonic anhydrase immobilized on a polyurethane foam. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2014 , 29, 146-50	5.6	116
1226	Carbonic anhydrase activators. Activation of isoforms I, II, IV, VA, VII, and XIV with L- and D-phenylalanine and crystallographic analysis of their adducts with isozyme II: stereospecific recognition within the active site of an enzyme and its consequences for the drug design. <i>Journal of Medicinal Chemistry</i> , 2006 , 49, 3019-27	8.3	116
1225	COX-2 selective inhibitors, carbonic anhydrase inhibition and anticancer properties of sulfonamides belonging to this class of pharmacological agents. <i>Mini-Reviews in Medicinal Chemistry</i> , 2004 , 4, 625-32	3.2	116
1224	Inhibitors of HIV-1 protease: current state of the art 10 years after their introduction. From antiretroviral drugs to antifungal, antibacterial and antitumor agents based on aspartic protease inhibitors. <i>Current Medicinal Chemistry</i> , 2007 , 14, 2734-48	4.3	115
1223	Unsymmetrical 1,1'-disubstituted ferrocenes: synthesis of Co(ii), Cu(ii), Ni(ii) and Zn(ii) chelates of ferrocenyl -1-thiadiazolo-1'-tetrazole, -1-thiadiazolo-1'-triazole and -1-tetrazolo-1'-triazole with antimicrobial properties. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2002 , 17, 261-6	5.6	115
1222	Carbonic anhydrase inhibitors [Part 57: Quantum chemical QSAR of a group of 1,3,4-thiadiazole- and 1,3,4-thiadiazoline disulfonamides with carbonic anhydrase inhibitory properties. <i>European Journal of Medicinal Chemistry</i> , 1999 , 34, 41-50	6.8	115
1221	Carbonic anhydrase inhibitors: Inhibition of human erythrocyte isozymes I and II with a series of phenolic acids. <i>Chemical Biology and Drug Design</i> , 2010 , 75, 515-20	2.9	114

1220	Carbonic anhydrase inhibitors: inhibition of mammalian isoforms I-XIV with a series of substituted phenols including paracetamol and salicylic acid. <i>Bioorganic and Medicinal Chemistry</i> , 2008 , 16, 7424-8	3-4	114
1219	Inhibition of the archaeal beta-class (Cab) and gamma-class (Cam) carbonic anhydrases. <i>Current Topics in Medicinal Chemistry</i> , 2007 , 7, 901-8	3	113
1218	Synthesis and carbonic anhydrase inhibitory properties of sulfamides structurally related to dopamine. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 2925-31	3-4	112
1217	In-vitro antibacterial, antifungal and cytotoxic activities of some coumarins and their metal complexes. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2005 , 20, 333-40	5.6	111
1216	Review on plug-in electric vehicle charging architectures integrated with distributed energy sources for sustainable mobility. <i>Applied Energy</i> , 2017 , 207, 438-464	10.7	110
1215	The coumarin-binding site in carbonic anhydrase accommodates structurally diverse inhibitors: the antiepileptic lacosamide as an example and lead molecule for novel classes of carbonic anhydrase inhibitors. <i>Journal of Medicinal Chemistry</i> , 2010 , 53, 850-4	8.3	110
1214	Anticonvulsant sulfonamides/sulfamates/sulfamides with carbonic anhydrase inhibitory activity: drug design and mechanism of action. <i>Current Pharmaceutical Design</i> , 2008 , 14, 661-71	3-3	110
1213	Acetazolamide for the treatment of idiopathic intracranial hypertension. <i>Expert Review of Neurotherapeutics</i> , 2015 , 15, 851-6	4.3	108
1212	Carbonic anhydrase inhibition/activation: trip of a scientist around the world in the search of novel chemotypes and drug targets. <i>Current Pharmaceutical Design</i> , 2010 , 16, 3233-45	3-3	108
1211	Carbonic anhydrase IX inhibitors in cancer therapy: an update. <i>Future Medicinal Chemistry</i> , 2015 , 7, 1407-14	4.4	106
1210	Root effect hemoglobin may have evolved to enhance general tissue oxygen delivery. <i>Science</i> , 2013 , 340, 1327-9	33.3	106
1209	Carbonic anhydrase inhibitors. Inhibition of cytosolic/tumor-associated carbonic anhydrase isozymes I, II, IX, and XII with Schiff's bases incorporating chromone and aromatic sulfonamide moieties, and their zinc complexes. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2005 , 15, 3096-101	2.9	106
1208	Carbonic anhydrase inhibitors: synthesis of sulfonamides incorporating dtpa tails and of their zinc complexes with powerful topical antiglaucoma properties. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2001 , 11, 575-82	2.9	106
1207	A magnificent enzyme superfamily: carbonic anhydrases, their purification and characterization. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 689-94	5.6	105
1206	Carbonic anhydrase and acetylcholinesterase inhibitory effects of carbamates and sulfamoylcarbamates. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 316-20	5.6	105
1205	Carbonic anhydrase inhibitors: guaiacol and catechol derivatives effectively inhibit certain human carbonic anhydrase isoenzymes (hCA I, II, IX and XII). <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 586-91	5.6	105
1204	Novel therapies for glaucoma: a patent review 2007 - 2011. <i>Expert Opinion on Therapeutic Patents</i> , 2012 , 22, 79-88	6.8	104
1203	Carbonic anhydrase inhibition and the management of neuropathic pain. <i>Expert Review of Neurotherapeutics</i> , 2016 , 16, 961-8	4.3	104

1202	A class of sulfonamide carbonic anhydrase inhibitors with neuropathic pain modulating effects. <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 1828-40	3.4	103
1201	The effect of caffeic acid phenethyl ester (CAPE) on metabolic enzymes including acetylcholinesterase, butyrylcholinesterase, glutathione S-transferase, lactoperoxidase, and carbonic anhydrase isoenzymes I, II, IX, and XII. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1095-101	5.6	101
1200	Synthesis of diaryl ethers with acetylcholinesterase, butyrylcholinesterase and carbonic anhydrase inhibitory actions. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 79-85	5.6	101
1199	Novel coumarins and 2-thioxo-coumarins as inhibitors of the tumor-associated carbonic anhydrases IX and XII. <i>Bioorganic and Medicinal Chemistry</i> , 2012 , 20, 2266-73	3.4	101
1198	Carbonic anhydrase activators. 3: structure-activity correlations for a series of isozyme II activators. <i>Journal of Pharmaceutical Sciences</i> , 1994 , 83, 768-73	3.9	100
1197	Synthesis and bioactivity studies on new 4-(3-(4-Substitutedphenyl)-3a,4-dihydro-3H-indeno[1,2-c]pyrazol-2-yl) benzenesulfonamides. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1619-24	5.6	100
1196	Carbonic anhydrase inhibitor coated gold nanoparticles selectively inhibit the tumor-associated isoform IX over the cytosolic isozymes I and II. <i>Journal of the American Chemical Society</i> , 2008 , 130, 16130-14	16.4	99
1195	Bacterial proteases: current therapeutic use and future prospects for the development of new antibiotics. <i>Expert Opinion on Therapeutic Patents</i> , 2001 , 11, 221-259	6.8	99
1194	Inhibitory effects of isatin Mannich bases on carbonic anhydrases, acetylcholinesterase, and butyrylcholinesterase. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1498-501	5.6	98
1193	Experimental analysis on the performance of lithium based batteries for road full electric and hybrid vehicles. <i>Applied Energy</i> , 2014 , 136, 921-930	10.7	98
1192	Carbonic anhydrase inhibitors. Cloning, characterization, and inhibition studies of a new beta-carbonic anhydrase from Mycobacterium tuberculosis. <i>Journal of Medicinal Chemistry</i> , 2009 , 52, 3116-20	8.3	98
1191	Cloning, characterization, and inhibition studies of a beta-carbonic anhydrase from Brucella suis. <i>Journal of Medicinal Chemistry</i> , 2010 , 53, 2277-85	8.3	97
1190	Out of the active site binding pocket for carbonic anhydrase inhibitors. <i>Chemical Communications</i> , 2015 , 51, 302-5	5.8	96
1189	Advances in the structural annotation of human carbonic anhydrases and impact on future drug discovery. <i>Expert Opinion on Drug Discovery</i> , 2019 , 14, 1175-1197	6.2	96
1188	An α -carbonic anhydrase from the thermophilic bacterium Sulphurihydrogenibium azorense is the fastest enzyme known for the CO ₂ hydration reaction. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 1465-9	3.4	96
1187	Therapeutic applications of glycosidic carbonic anhydrase inhibitors. <i>Medicinal Research Reviews</i> , 2009 , 29, 419-35	14.4	96
1186	The zinc coordination pattern in the β -carbonic anhydrase from Plasmodium falciparum is different from all other carbonic anhydrase genetic families. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015 , 25, 1385-9	2.9	95
1185	Design and Synthesis of Novel Nonsteroidal Anti-Inflammatory Drugs and Carbonic Anhydrase Inhibitors Hybrids (NSAIDs-CAIs) for the Treatment of Rheumatoid Arthritis. <i>Journal of Medicinal Chemistry</i> , 2017 , 60, 1159-1170	8.3	94

1184	Efficient Expression and Crystallization System of Cancer-Associated Carbonic Anhydrase Isoform IX. <i>Journal of Medicinal Chemistry</i> , 2015 , 58, 9004-9	8.3	94
1183	Carbonic anhydrase inhibitors: in vitro inhibition of β isoforms (hCA I, hCA II, bCA III, hCA IV) by flavonoids. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2013 , 28, 283-8	5.6	94
1182	Carbonic anhydrase inhibitors: Hypoxia-activatable sulfonamides incorporating disulfide bonds that target the tumor-associated isoform IX. <i>Journal of Medicinal Chemistry</i> , 2006 , 49, 5544-51	8.3	93
1181	Synthesis of 4,5-disubstituted-2-thioxo-1,2,3,4-tetrahydropyrimidines and investigation of their acetylcholinesterase, butyrylcholinesterase, carbonic anhydrase I/II inhibitory and antioxidant activities. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1-9	5.6	92
1180	Oxidation of cyanobenzocycloheptatrienes: Synthesis, photooxygenation reaction and carbonic anhydrase isoenzymes inhibition properties of some new benzotropone derivatives. <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 3537-43	3.4	92
1179	Carbonic anhydrase inhibitory properties of novel sulfonamide derivatives of aminoindanes and aminotetralins. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2014 , 29, 35-42	5.6	92
1178	Regulation of pH by Carbonic Anhydrase 9 Mediates Survival of Pancreatic Cancer Cells With Activated KRAS in Response to Hypoxia. <i>Gastroenterology</i> , 2019 , 157, 823-837	13.3	91
1177	DNA cloning, characterization, and inhibition studies of an α carbonic anhydrase from the pathogenic bacterium <i>Vibrio cholerae</i> . <i>Journal of Medicinal Chemistry</i> , 2012 , 55, 10742-8	8.3	91
1176	Carbonic anhydrase inhibitors. Characterization and inhibition studies of the most active beta-carbonic anhydrase from <i>Mycobacterium tuberculosis</i> , Rv3588c. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009 , 19, 6649-54	2.9	91
1175	2-substituted estradiol bis-sulfamates, multitargeted antitumor agents: synthesis, in vitro SAR, protein crystallography, and in vivo activity. <i>Journal of Medicinal Chemistry</i> , 2006 , 49, 7683-96	8.3	91
1174	Carbonic anhydrase activators: X-ray crystal structure of the adduct of human isozyme II with L-histidine as a platform for the design of stronger activators. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2005 , 15, 5136-41	2.9	91
1173	Crystal structure of human carbonic anhydrase XIII and its complex with the inhibitor acetazolamide. <i>Proteins: Structure, Function and Bioinformatics</i> , 2009 , 74, 164-75	4.2	90
1172	Carbonic anhydrase inhibitors: cloning, characterization, and inhibition studies of the cytosolic isozyme III with sulfonamides. <i>Bioorganic and Medicinal Chemistry</i> , 2007 , 15, 7229-36	3.4	90
1171	Carbonic anhydrase inhibitors: inhibition of the beta-class enzymes from the fungal pathogens <i>Candida albicans</i> and <i>Cryptococcus neoformans</i> with simple anions. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008 , 18, 5066-70	2.9	90
1170	Carbonic anhydrase inhibitors: synthesis and inhibition of cytosolic/tumor-associated carbonic anhydrase isozymes I, II, and IX with sulfonamides incorporating 1,2,4-triazine moieties. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2004 , 14, 5427-33	2.9	90
1169	Dithiocarbamates are strong inhibitors of the beta-class fungal carbonic anhydrases from <i>Cryptococcus neoformans</i> , <i>Candida albicans</i> and <i>Candida glabrata</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012 , 22, 859-62	2.9	89
1168	Novel 4/3-((4-oxo-5-(2-oxoindolin-3-ylidene)thiazolidin-2-ylidene)amino) benzenesulfonamides: Synthesis, carbonic anhydrase inhibitory activity, anticancer activity and molecular modelling studies. <i>European Journal of Medicinal Chemistry</i> , 2017 , 139, 250-262	6.8	89
1167	X-ray structure of the first 'extreme- α carbonic anhydrase', a dimeric enzyme from the thermophilic bacterium <i>Sulfolobus solfataricus</i> yellowstonense YO3AOP1. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2013 , 69, 1150-9		89

1166	Kinetic and docking studies of phenol-based inhibitors of carbonic anhydrase isoforms I, II, IX and XII evidence a new binding mode within the enzyme active site. <i>Bioorganic and Medicinal Chemistry</i> , 2011 , 19, 1381-9	3.4	89
1165	Carbonic anhydrase inhibitors: Valdecoxib binds to a different active site region of the human isoform II as compared to the structurally related cyclooxygenase II "selective" inhibitor celecoxib. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2006 , 16, 437-42	2.9	89
1164	Structural and inhibition insights into carbonic anhydrase CDCA1 from the marine diatom <i>Thalassiosira weissflogii</i> . <i>Biochimie</i> , 2012 , 94, 1232-41	4.6	88
1163	Investigations of the esterase, phosphatase, and sulfatase activities of the cytosolic mammalian carbonic anhydrase isoforms I, II, and XIII with 4-nitrophenyl esters as substrates. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008 , 18, 2267-71	2.9	88
1162	Biochemical properties of a novel and highly thermostable bacterial α -carbonic anhydrase from <i>Sulfurihydrogenibium yellowstonense</i> YO3AOP1. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2012 , 27, 892-7	5.6	87
1161	An Overview of the Selectivity and Efficiency of the Bacterial Carbonic Anhydrase Inhibitors. <i>Current Medicinal Chemistry</i> , 2015 , 22, 2130-9	4.3	87
1160	Carbon- versus sulphur-based zinc binding groups for carbonic anhydrase inhibitors?. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 485-495	5.6	86
1159	Carbonic anhydrase activators. <i>Future Medicinal Chemistry</i> , 2018 , 10, 561-573	4.1	86
1158	Combining the tail and the ring approaches for obtaining potent and isoform-selective carbonic anhydrase inhibitors: solution and X-ray crystallographic studies. <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 334-40	3.4	86
1157	Glaucoma and the applications of carbonic anhydrase inhibitors. <i>Sub-Cellular Biochemistry</i> , 2014 , 75, 349-59	5.9	86
1156	Biochemical properties of a new α -carbonic anhydrase from the human pathogenic bacterium, <i>Vibrio cholerae</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2014 , 29, 23-7	5.6	85
1155	Natural product-based phenols as novel probes for mycobacterial and fungal carbonic anhydrases. <i>Journal of Medicinal Chemistry</i> , 2011 , 54, 1682-92	8.3	85
1154	Molecular cloning, characterization, and inhibition studies of the Rv1284 beta-carbonic anhydrase from <i>Mycobacterium tuberculosis</i> with sulfonamides and a sulfamate. <i>Journal of Medicinal Chemistry</i> , 2009 , 52, 2226-32	8.3	85
1153	Effect of sulfonamides as carbonic anhydrase VA and VB inhibitors on mitochondrial metabolic energy conversion. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 1544-8	3.4	84
1152	The human carbonic anhydrase isoenzymes I and II (hCA I and II) inhibition effects of trimethoxyindane derivatives. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 152-7	5.6	83
1151	Crystal structure and kinetic studies of a tetrameric type II α -carbonic anhydrase from the pathogenic bacterium <i>Vibrio cholerae</i> . <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2015 , 71, 2449-56		83
1150	A Phase 1 Study of SLC-0111, a Novel Inhibitor of Carbonic Anhydrase IX, in Patients With Advanced Solid Tumors. <i>American Journal of Clinical Oncology: Cancer Clinical Trials</i> , 2020 , 43, 484-490	2.7	82
1149	Inhibition of the α - and β -carbonic anhydrases from the gastric pathogen <i>Helicobacter pylori</i> with anions. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2013 , 28, 388-91	5.6	82

1148	Natural product coumarins that inhibit human carbonic anhydrases. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 1539-43	3.4	82
1147	Carbonic anhydrase inhibitors drug design. <i>Sub-Cellular Biochemistry</i> , 2014 , 75, 291-323	5.5	82
1146	Xanthates and trithiocarbonates strongly inhibit carbonic anhydrases and show antiglaucoma effects in vivo. <i>Journal of Medicinal Chemistry</i> , 2013 , 56, 4691-700	8.3	82
1145	Sulfonamides incorporating 1,3,5-triazine moieties selectively and potently inhibit carbonic anhydrase transmembrane isoforms IX, XII and XIV over cytosolic isoforms I and II: Solution and X-ray crystallographic studies. <i>Bioorganic and Medicinal Chemistry</i> , 2011 , 19, 3105-19	3.4	82
1144	Carbonic anhydrase activators: L-Adrenaline plugs the active site entrance of isozyme II, activating better isoforms I, IV, VA, VII, and XIV. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2007 , 17, 628-35	2.9	82
1143	Antiobesity carbonic anhydrase inhibitors. <i>Current Topics in Medicinal Chemistry</i> , 2007 , 7, 879-84	3	82
1142	Carbonic anhydrase inhibitors: aromatic and heterocyclic sulfonamides incorporating adamantyl moieties with strong anticonvulsant activity. <i>Bioorganic and Medicinal Chemistry</i> , 2004 , 12, 2717-26	3.4	82
1141	Cloning, characterization, and sulfonamide and thiol inhibition studies of a carbonic anhydrase from <i>Trypanosoma cruzi</i> , the causative agent of Chagas disease. <i>Journal of Medicinal Chemistry</i> , 2013 , 56, 1761-71	8.3	81
1140	Metronidazole-coumarin conjugates and 3-cyano-7-hydroxy-coumarin act as isoform-selective carbonic anhydrase inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2013 , 28, 397-401	5.6	81
1139	Selective inhibition of carbonic anhydrase IX decreases cell proliferation and induces ceramide-mediated apoptosis in human cancer cells. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2010 , 334, 710-9	4.7	81
1138	Synthesis and biological evaluation of a ^{99m} Tc-labelled sulfonamide conjugate for in vivo visualization of carbonic anhydrase IX expression in tumor hypoxia. <i>Nuclear Medicine and Biology</i> , 2010 , 37, 557-64	2.1	81
1137	Applications of carbonic anhydrases inhibitors in renal and central nervous system diseases. <i>Expert Opinion on Therapeutic Patents</i> , 2018 , 28, 713-721	6.8	81
1136	Carbonic anhydrase inhibitors. DNA cloning, characterization, and inhibition studies of the human secretory isoform VI, a new target for sulfonamide and sulfamate inhibitors. <i>Journal of Medicinal Chemistry</i> , 2007 , 50, 381-8	8.3	80
1135	Investigation of inhibitory properties of some hydrazone compounds on hCA I, hCA II and AChE enzymes. <i>Bioorganic Chemistry</i> , 2019 , 86, 316-321	5.1	80
1134	The synthesis of some lactams and investigation of their metal-chelating activity, carbonic anhydrase and acetylcholinesterase inhibition profiles. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 79-88	5.6	80
1133	Targeting tumour hypoxia to prevent cancer metastasis. From biology, biosensing and technology to drug development: the METOXIA consortium. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 689-721	5.6	79
1132	Cloning, characterization, and inhibition studies of a carbonic anhydrase from <i>Leishmania donovani</i> chagasi, the protozoan parasite responsible for leishmaniasis. <i>Journal of Medicinal Chemistry</i> , 2013 , 56, 7372-81	8.3	79
1131	Carbonic anhydrase inhibition for the management of cerebral ischemia: in vivo evaluation of sulfonamide and coumarin inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 894-9	5.6	78

1130	Novel coumarins and benzocoumarins acting as isoform-selective inhibitors against the tumor-associated carbonic anhydrase IX. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2014 , 29, 292-6	5.6	78
1129	Carbonic anhydrase inhibitors: inhibition of the beta-class enzyme from the yeast <i>Saccharomyces cerevisiae</i> with sulfonamides and sulfamates. <i>Bioorganic and Medicinal Chemistry</i> , 2009 , 17, 1158-63	3.4	78
1128	Synthesis of some tetrahydropyrimidine-5-carboxylates, determination of their metal chelating effects and inhibition profiles against acetylcholinesterase, butyrylcholinesterase and carbonic anhydrase. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1531-9	5.6	78
1127	Isatin-pyrazole benzenesulfonamide hybrids potently inhibit tumor-associated carbonic anhydrase isoforms IX and XII. <i>European Journal of Medicinal Chemistry</i> , 2015 , 103, 583-93	6.8	77
1126	Carbonic anhydrase inhibitors. Inhibition of the prokariotic beta and gamma-class enzymes from Archaea with sulfonamides. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2004 , 14, 6001-6	2.9	77
1125	Structural study of interaction between brinzolamide and dorzolamide inhibition of human carbonic anhydrases. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 7210-5	3.4	76
1124	6-Substituted sulfocoumarins are selective carbonic anhydrase IX and XII inhibitors with significant cytotoxicity against colorectal cancer cells. <i>Journal of Medicinal Chemistry</i> , 2015 , 58, 3975-83	8.3	75
1123	Protonography, a new technique for the analysis of carbonic anhydrase activity. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 277-82	5.6	75
1122	Discovery of low nanomolar and subnanomolar inhibitors of the mycobacterial beta-carbonic anhydrases Rv1284 and Rv3273. <i>Journal of Medicinal Chemistry</i> , 2009 , 52, 4063-7	8.3	75
1121	Carbonic anhydrase inhibitors. Inhibition of <i>Plasmodium falciparum</i> carbonic anhydrase with aromatic sulfonamides: towards antimalarials with a novel mechanism of action?. <i>Bioorganic and Medicinal Chemistry</i> , 2005 , 13, 483-9	3.4	75
1120	Targeting carbonic anhydrase IX by nitroimidazole based sulfamides enhances the therapeutic effect of tumor irradiation: a new concept of dual targeting drugs. <i>Radiotherapy and Oncology</i> , 2013 , 108, 523-8	5.3	74
1119	The impact of hydroquinone on acetylcholine esterase and certain human carbonic anhydrase isoenzymes (hCA I, II, IX, and XII). <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 941-6	5.6	74
1118	Carbonic anhydrase inhibitors. X-ray crystal studies of the carbonic anhydrase II-trithiocarbonate adduct--an inhibitor mimicking the sulfonamide and urea binding to the enzyme. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010 , 20, 474-8	2.9	74
1117	Carbonic anhydrase inhibitors. Sulfonamide diuretics revisited--old leads for new applications?. <i>Organic and Biomolecular Chemistry</i> , 2008 , 6, 2499-506	3.9	74
1116	Carbonic anhydrase activators: the first X-ray crystallographic study of an adduct of isoform I. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2006 , 16, 5152-6	2.9	74
1115	Carbonic anhydrase inhibitors. Part 61. Quantum chemical QSAR of a group of benzenedisulfonamides. <i>European Journal of Medicinal Chemistry</i> , 1999 , 34, 463-474	6.8	74
1114	Non-Classical Inhibition of Carbonic Anhydrase. <i>International Journal of Molecular Sciences</i> , 2016 , 17,	6.3	74
1113	Benzenesulfonamides Incorporating Flexible Triazole Moieties Are Highly Effective Carbonic Anhydrase Inhibitors: Synthesis and Kinetic, Crystallographic, Computational, and Intraocular Pressure Lowering Investigations. <i>Journal of Medicinal Chemistry</i> , 2016 , 59, 10692-10704	8.3	73

1112	Inhibition of carbonic anhydrase IX as a novel anticancer mechanism. <i>World Journal of Clinical Oncology</i> , 2012 , 3, 98-103	2.5	73
1111	The proteoglycan region of the tumor-associated carbonic anhydrase isoform IX acts as an intrinsic buffer optimizing CO ₂ hydration at acidic pH values characteristic of solid tumors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009 , 19, 5825-8	2.9	73
1110	Crystal structure of the C183S/C217S mutant of human CA VII in complex with acetazolamide. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010 , 20, 5023-6	2.9	73
1109	Unique structural features of the monomeric Cu ₂ Zn superoxide dismutase from <i>Escherichia coli</i> , revealed by X-ray crystallography. <i>Journal of Molecular Biology</i> , 1997 , 274, 408-20	6.5	73
1108	Carbonic anhydrase activation and the drug design. <i>Current Pharmaceutical Design</i> , 2008 , 14, 708-15	3.3	73
1107	Transition Metal Ion Complexes of Schiff-bases. Synthesis, Characterization and Antibacterial Properties. <i>Metal-Based Drugs</i> , 2001 , 8, 137-43		73
1106	Progress in the development of human carbonic anhydrase inhibitors and their pharmacological applications: Where are we today?. <i>Medicinal Research Reviews</i> , 2020 , 40, 2485-2565	14.4	73
1105	Overexpression of the transmembrane carbonic anhydrase isoforms IX and XII in the inflamed synovium. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 60-63	5.6	72
1104	CO ₂ permeability of cell membranes is regulated by membrane cholesterol and protein gas channels. <i>FASEB Journal</i> , 2012 , 26, 5182-91	0.9	72
1103	A new coral carbonic anhydrase in <i>Stylophora pistillata</i> . <i>Marine Biotechnology</i> , 2011 , 13, 992-1002	3.4	72
1102	A new β -carbonic anhydrase from <i>Brucella suis</i> , its cloning, characterization, and inhibition with sulfonamides and sulfamates, leading to impaired pathogen growth. <i>Bioorganic and Medicinal Chemistry</i> , 2011 , 19, 1172-8	3.4	72
1101	Secondary/tertiary benzenesulfonamides with inhibitory action against the cytosolic human carbonic anhydrase isoforms I and II. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2013 , 28, 294-8	5.6	71
1100	Anion inhibition studies of an β -carbonic anhydrase from the thermophilic bacterium <i>Sulfolobus solfataricus</i> YO3AOP1. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012 , 22, 5630-4	2.9	71
1099	Dihalogenated sulfanilamides and benzolamides are effective inhibitors of the three β -class carbonic anhydrases from <i>Mycobacterium tuberculosis</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2013 , 28, 384-7	5.6	71
1098	Benzoxaborole compounds for therapeutic uses: a patent review (2010- 2018). <i>Expert Opinion on Therapeutic Patents</i> , 2018 , 28, 493-504	6.8	70
1097	Regulation of HIF1 α under Hypoxia by APE1/Ref-1 Impacts CA9 Expression: Dual Targeting in Patient-Derived 3D Pancreatic Cancer Models. <i>Molecular Cancer Therapeutics</i> , 2016 , 15, 2722-2732	6.1	70
1096	Toxicity, accumulation, and removal of heavy metals by three aquatic macrophytes. <i>International Journal of Phytoremediation</i> , 2012 , 14, 374-87	3.9	70
1095	The β -carbonic anhydrases from <i>Mycobacterium tuberculosis</i> as drug targets. <i>Current Pharmaceutical Design</i> , 2010 , 16, 3300-9	3.3	70

1094	Carbonic anhydrase inhibitors [Part 53. Synthesis of substituted-pyridinium derivatives of aromatic sulfonamides: The first non-polymeric membrane-impermeable inhibitors with selectivity for isozyme IV. <i>European Journal of Medicinal Chemistry</i> , 1998 , 33, 577-594	6.8	70
1093	Arylsulfonyl-N,N-diethyl-dithiocarbamates: a novel class of antitumor agents. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2000 , 10, 1887-91	2.9	70
1092	Carbonic Anhydrase Inhibitors Targeting Metabolism and Tumor Microenvironment. <i>Metabolites</i> , 2020 , 10,	5.6	70
1091	The effects of some bromophenols on human carbonic anhydrase isoenzymes. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 603-7	5.6	69
1090	Carbonic anhydrase inhibitors with dual-tail moieties to match the hydrophobic and hydrophilic halves of the carbonic anhydrase active site. <i>Journal of Medicinal Chemistry</i> , 2015 , 58, 1494-501	8.3	69
1089	The first activation study of a bacterial carbonic anhydrase (CA). The thermostable β CA from <i>Sulfurihydrogenibium yellowstonense</i> YO3AOP1 is highly activated by amino acids and amines. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012 , 22, 6324-7	2.9	69
1088	Carbonic anhydrase III: a neglected isozyme is stepping into the limelight. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2013 , 28, 231-9	5.6	69
1087	Inhibition of the β carbonic anhydrase from <i>Streptococcus pneumoniae</i> by inorganic anions and small molecules: Toward innovative drug design of antiinfectives?. <i>Bioorganic and Medicinal Chemistry</i> , 2011 , 19, 243-8	3.4	69
1086	Design of zinc binding functions for carbonic anhydrase inhibitors. <i>Current Pharmaceutical Design</i> , 2008 , 14, 615-21	3.3	69
1085	Carbonic anhydrase inhibitors: synthesis and inhibition of cytosolic/membrane-associated carbonic anhydrase isozymes I, II, and IX with sulfonamides incorporating hydrazino moieties. <i>Journal of Medicinal Chemistry</i> , 2005 , 48, 2121-5	8.3	69
1084	Recent advances in the discovery of zinc-binding motifs for the development of carbonic anhydrase inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 321-4	5.6	68
1083	Drug interaction considerations in the therapeutic use of carbonic anhydrase inhibitors. <i>Expert Opinion on Drug Metabolism and Toxicology</i> , 2016 , 12, 423-31	5.5	68
1082	Inhibition of the β class carbonic anhydrases from <i>Mycobacterium tuberculosis</i> with carboxylic acids. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2013 , 28, 392-6	5.6	68
1081	Hypoxia-targeting carbonic anhydrase IX inhibitors by a new series of nitroimidazole-sulfonamides/sulfamides/sulfamates. <i>Journal of Medicinal Chemistry</i> , 2013 , 56, 8512-20	8.3	68
1080	Carbonic anhydrase activators: design of high affinity isozymes I, II, and IV activators, incorporating tri-/tetrasubstituted-pyridinium-azole moieties. <i>Journal of Medicinal Chemistry</i> , 2002 , 45, 504-10	8.3	68
1079	New anticancer drug candidates sulfonamides as selective hCA IX or hCA XII inhibitors. <i>Bioorganic Chemistry</i> , 2018 , 77, 411-419	5.1	67
1078	Biomedical applications of prokaryotic carbonic anhydrases. <i>Expert Opinion on Therapeutic Patents</i> , 2018 , 28, 745-754	6.8	67
1077	Secondary and tertiary sulfonamides: a patent review (2008 - 2012). <i>Expert Opinion on Therapeutic Patents</i> , 2013 , 23, 203-13	6.8	67

1076	Synthesis and biological evaluation of aminomethyl and alkoxymethyl derivatives as carbonic anhydrase, acetylcholinesterase and butyrylcholinesterase inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 1174-1182	5.6	67
1075	Carbonic anhydrases inhibitory effects of new benzenesulfonamides synthesized by using superacid chemistry. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2012 , 27, 886-91	5.6	67
1074	Carbonic anhydrase inhibitors: inhibition of human and bovine isoenzymes by benzenesulphonamides, cyclitols and phenolic compounds. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2012 , 27, 845-8	5.6	67
1073	Associations of selenium status with cardiometabolic risk factors: an 8-year follow-up analysis of the Olivetti Heart study. <i>Atherosclerosis</i> , 2011 , 217, 274-8	3.1	67
1072	Experimental study of a DC charging station for full electric and plug in hybrid vehicles. <i>Applied Energy</i> , 2015 , 152, 131-142	10.7	66
1071	Carbonic anhydrase inhibitors. Inhibition of the beta-class enzymes from the fungal pathogens <i>Candida albicans</i> and <i>Cryptococcus neoformans</i> with aliphatic and aromatic carboxylates. <i>Bioorganic and Medicinal Chemistry</i> , 2009 , 17, 2654-7	3.4	66
1070	Carbonic anhydrase inhibitors. The X-ray crystal structure of human isoform II in adduct with an adamantyl analogue of acetazolamide resides in a less utilized binding pocket than most hydrophobic inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010 , 20, 4376-81	2.9	66
1069	The alpha-carbonic anhydrase from the malaria parasite and its inhibition. <i>Current Pharmaceutical Design</i> , 2008 , 14, 631-40	3.3	66
1068	Anticonvulsant 4-aminobenzenesulfonamide derivatives with branched-alkylamide moieties: X-ray crystallography and inhibition studies of human carbonic anhydrase isoforms I, II, VII, and XIV. <i>Journal of Medicinal Chemistry</i> , 2011 , 54, 3977-81	8.3	65
1067	Design, synthesis, and docking studies of new 1,3,4-thiadiazole-2-thione derivatives with carbonic anhydrase inhibitory activity. <i>Bioorganic and Medicinal Chemistry</i> , 2007 , 15, 6975-84	3.4	65
1066	Biochemical characterization of recombinant β -carbonic anhydrase (PgiCAB) identified in the genome of the oral pathogenic bacterium <i>Porphyromonas gingivalis</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 366-70	5.6	64
1065	Design, synthesis, and evaluation of hydroxamic acid derivatives as promising agents for the management of Chagas disease. <i>Journal of Medicinal Chemistry</i> , 2014 , 57, 298-308	8.3	64
1064	Inhibition and binding studies of carbonic anhydrase isozymes I, II and IX with benzimidazo[1,2-c][1,2,3]thiadiazole-7-sulphonamides. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2010 , 25, 863-70	5.6	64
1063	The protein tyrosine kinase inhibitors imatinib and nilotinib strongly inhibit several mammalian alpha-carbonic anhydrase isoforms. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009 , 19, 4102-6	2.9	64
1062	β -Carbonic anhydrases are sulfatases with cyclic diol monosulfate esters. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2012 , 27, 148-54	5.6	63
1061	Inhibition studies with anions and small molecules of two novel β -carbonic anhydrases from the bacterial pathogen <i>Salmonella enterica</i> serovar Typhimurium. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011 , 21, 3591-5	2.9	63
1060	Nanoscale enzyme inhibitors: fullerenes inhibit carbonic anhydrase by occluding the active site entrance. <i>Bioorganic and Medicinal Chemistry</i> , 2010 , 18, 2822-8	3.4	63
1059	Carbonic anhydrase inhibitors. Identification of selective inhibitors of the human mitochondrial isozymes VA and VB over the cytosolic isozymes I and II from a natural product-based phenolic library. <i>Bioorganic and Medicinal Chemistry</i> , 2010 , 18, 14-8	3.4	63

1058	Enhancement of the tail hydrophobic interactions within the carbonic anhydrase IX active site via structural extension: Design and synthesis of novel N-substituted isatins-SLC-0111 hybrids as carbonic anhydrase inhibitors and antitumor agents. <i>European Journal of Medicinal Chemistry</i> , 2019 , 162, 147-160	6.8	63
1057	Synthesis and carbonic anhydrase inhibition of a series of SLC-0111 analogs. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 2569-2576	3.4	62
1056	Amido/ureidosubstituted benzenesulfonamides-isatin conjugates as low nanomolar/subnanomolar inhibitors of the tumor-associated carbonic anhydrase isoform XII. <i>European Journal of Medicinal Chemistry</i> , 2016 , 110, 259-66	6.8	62
1055	Thioxocoumarins Show an Alternative Carbonic Anhydrase Inhibition Mechanism Compared to Coumarins. <i>Journal of Medicinal Chemistry</i> , 2016 , 59, 462-73	8.3	62
1054	Biochemical characterization of the α -carbonic anhydrase from the oral pathogen <i>Porphyromonas gingivalis</i> , PgiCA. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2014 , 29, 532-7	5.6	62
1053	Polypharmacology of sulfonamides: pazopanib, a multitargeted receptor tyrosine kinase inhibitor in clinical use, potently inhibits several mammalian carbonic anhydrases. <i>Chemical Communications</i> , 2012 , 48, 8177-9	5.8	62
1052	Rational drug repositioning guided by an integrated pharmacological network of protein, disease and drug. <i>BMC Systems Biology</i> , 2012 , 6, 80	3.5	62
1051	7-Substituted-sulfocoumarins are isoform-selective, potent carbonic anhydrase II inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 4502-10	3.4	62
1050	Which carbonic anhydrases are targeted by the antiepileptic sulfonamides and sulfamates?. <i>Chemical Biology and Drug Design</i> , 2009 , 74, 317-21	2.9	62
1049	Novel aromatic/heterocyclic sulfonamides and their metal complexes as inhibitors of carbonic anhydrase isozymes I, II and IV. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 1997 , 12, 37-51		62
1048	Carbonic anhydrase inhibitors: X-ray crystallographic structure of the adduct of human isozyme II with the antipsychotic drug sulpiride. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2004 , 14, 337-41	2.9	62
1047	Click-tailed coumarins with potent and selective inhibitory action against the tumor-associated carbonic anhydrases IX and XII. <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 6955-66	3.4	61
1046	Exploring the multiple binding modes of inhibitors to carbonic anhydrases for novel drug discovery. <i>Expert Opinion on Drug Discovery</i> , 2020 , 15, 671-686	6.2	61
1045	Carbonic anhydrase inhibitors: inhibition of <i>Plasmodium falciparum</i> carbonic anhydrase with aromatic/heterocyclic sulfonamides-in vitro and in vivo studies. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008 , 18, 5466-71	2.9	61
1044	Carbonic anhydrase inhibitors: sulfonamides incorporating furan-, thiophene- and pyrrole-carboxamido groups possess strong topical intraocular pressure lowering properties as aqueous suspensions. <i>Bioorganic and Medicinal Chemistry</i> , 2000 , 8, 2145-55	3.4	61
1043	The extremophilic carbonic anhydrase from the thermophilic bacterium <i>Sulfurihydrogenibium azorense</i> is highly inhibited by sulfonamides. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 4521-5	3.4	60
1042	Crystal structure of the most catalytically effective carbonic anhydrase enzyme known, SazCA from the thermophilic bacterium <i>Sulfurihydrogenibium azorense</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015 , 25, 2002-6	2.9	60
1041	Synthesis and evaluation of ¹⁸ F-labeled carbonic anhydrase IX inhibitors for imaging with positron emission tomography. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2014 , 29, 249-55	5.6	60

1040	Anion inhibition studies of the fastest carbonic anhydrase (CA) known, the extremo-CA from the bacterium <i>Sulfolobus solfataricus</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012 , 22, 7142-5	2.9	60
1039	Carbonic anhydrase activators: kinetic and X-ray crystallographic study for the interaction of D- and L-tryptophan with the mammalian isoforms I-XIV. <i>Bioorganic and Medicinal Chemistry</i> , 2008 , 16, 8373-8	3.4	60
1038	Carbonic anhydrase activators: human isozyme II is strongly activated by oligopeptides incorporating the carboxyterminal sequence of the bicarbonate anion exchanger AE1. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2002 , 12, 1177-80	2.9	60
1037	Carbonic anhydrase activators: high affinity isozymes I, II, and IV activators, incorporating a beta-alanyl-histidine scaffold. <i>Journal of Medicinal Chemistry</i> , 2002 , 45, 284-91	8.3	60
1036	Benzothiazole derivatives as anticancer agents. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 265-279	5.6	60
1035	Benzoxaborole as a new chemotype for carbonic anhydrase inhibition. <i>Chemical Communications</i> , 2016 , 52, 11983-11986	5.8	60
1034	Kinetic and X-ray crystallographic investigations on carbonic anhydrase isoforms I, II, IX and XII of a thioureido analog of SLC-0111. <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 976-81	3.4	59
1033	Carbonic anhydrase inhibitors. Interaction of indapamide and related diuretics with 12 mammalian isozymes and X-ray crystallographic studies for the indapamide-isozyme II adduct. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008 , 18, 2567-73	2.9	59
1032	New light on bacterial carbonic anhydrases phylogeny based on the analysis of signal peptide sequences. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1254-60	5.6	59
1031	Nanoscale Ion Emitters in Native Mass Spectrometry for Measuring Ligand-Protein Binding Affinities. <i>ACS Central Science</i> , 2019 , 5, 308-318	16.8	59
1030	Carbonic anhydrase IX inhibition affects viability of cancer cells adapted to extracellular acidosis. <i>Journal of Molecular Medicine</i> , 2017 , 95, 1341-1353	5.5	58
1029	Carbonic anhydrase inhibitors. Synthesis, and molecular structure of novel series N-substituted N'-(2-arylmethylthio-4-chloro-5-methylbenzenesulfonyl)guanidines and their inhibition of human cytosolic isozymes I and II and the transmembrane tumor-associated isozymes IX and XII. <i>European Journal of Medicinal Chemistry</i> , 2016 , 125, 137-47	6.8	58
1028	A highly catalytically active carbonic anhydrase from the pathogenic anaerobe <i>Porphyromonas gingivalis</i> and its inhibition profile with anions and small molecules. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013 , 23, 4067-71	2.9	58
1027	Biochemical characterization of the carbonic anhydrase from the marine diatom <i>Thalassiosira weissflogii</i> , TweCA. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2014 , 29, 906-11	5.6	58
1026	Hydroxamate represents a versatile zinc binding group for the development of new carbonic anhydrase inhibitors. <i>Chemical Communications</i> , 2012 , 48, 8838-40	5.8	58
1025	Carbonic anhydrase activation enhances object recognition memory in mice through phosphorylation of the extracellular signal-regulated kinase in the cortex and the hippocampus. <i>Neuropharmacology</i> , 2017 , 118, 148-156	5.5	57
1024	Synthesis and biological activity of novel thiourea derivatives as carbonic anhydrase inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 75-80	5.6	57
1023	Nitric oxide-donating carbonic anhydrase inhibitors for the treatment of open-angle glaucoma. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009 , 19, 6565-70	2.9	57

1022	Coumarinyl-substituted sulfonamides strongly inhibit several human carbonic anhydrase isoforms: solution and crystallographic investigations. <i>Bioorganic and Medicinal Chemistry</i> , 2010 , 18, 4873-8	3.4	57
1021	Characterization of the first beta-class carbonic anhydrase from an arthropod (<i>Drosophila melanogaster</i>) and phylogenetic analysis of beta-class carbonic anhydrases in invertebrates. <i>BMC Biochemistry</i> , 2010 , 11, 28	4.8	57
1020	Accumulation, localisation, and toxic effects of cadmium in the liverwort <i>Lunularia cruciata</i> . <i>Protoplasma</i> , 2004 , 223, 53-61	3.4	57
1019	Carbonic anhydrase inhibitors. Inhibition of the zinc and cobalt γ -class enzyme from the archaeon <i>Methanosarcina thermophila</i> with anions. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2004 , 14, 3327-3331	2.9	57
1018	Cadmium-induced differential accumulation of metallothionein isoforms in the Antarctic icefish, which exhibits no basal metallothionein protein but high endogenous mRNA levels. <i>Biochemical Journal</i> , 1998 , 332 (Pt 2), 475-81	3.8	57
1017	Cloning, characterization and anion inhibition study of the β -class carbonic anhydrase (TweCA) from the marine diatom <i>Thalassiosira weissflogii</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 531-7	3.4	56
1016	Carbonic anhydrase inhibition with natural products: novel chemotypes and inhibition mechanisms. <i>Molecular Diversity</i> , 2011 , 15, 305-16	3.1	56
1015	Carbonic anhydrase inhibitors: Inhibition of the new membrane-associated isoform XV with phenols. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008 , 18, 3593-6	2.9	56
1014	Protease inhibitors: synthesis of potent bacterial collagenase and matrix metalloproteinase inhibitors incorporating N-4-nitrobenzylsulfonfylglycine hydroxamate moieties. <i>Journal of Medicinal Chemistry</i> , 2000 , 43, 1858-65	8.3	56
1013	Steroids interfere with human carbonic anhydrase activity by using alternative binding mechanisms. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 1453-1459	5.6	56
1012	The synthesis of novel sulfamides derived from β -benzylphenethylamines as acetylcholinesterase, butyrylcholinesterase and carbonic anhydrase enzymes inhibitors. <i>Bioorganic Chemistry</i> , 2017 , 74, 238-250	5.1	55
1011	Characterization and anions inhibition studies of an β -carbonic anhydrase from the teleost fish <i>Dicentrarchus labrax</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2011 , 19, 744-8	3.4	55
1010	Bacterial β -carbonic anhydrase: a new active class of carbonic anhydrase identified in the genome of the Gram-negative bacterium. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 1060-1068	5.6	54
1009	5- and 6-membered (thio)lactones are prodrug type carbonic anhydrase inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012 , 22, 267-70	2.9	54
1008	Indanesulfonamides as carbonic anhydrase inhibitors. Toward structure-based design of selective inhibitors of the tumor-associated isozyme CA IX. <i>Journal of Medicinal Chemistry</i> , 2006 , 49, 2743-9	8.3	54
1007	An Overview of the Carbonic Anhydrases from Two Pathogens of the Oral Cavity: <i>Streptococcus mutans</i> and <i>Porphyromonas gingivalis</i> . <i>Current Topics in Medicinal Chemistry</i> , 2016 , 16, 2359-68	3	54
1006	Carbonic anhydrase inhibitors. Comparison of chlorthalidone, indapamide, trichloromethiazide, and furosemide X-ray crystal structures in adducts with isozyme II, when several water molecules make the difference. <i>Bioorganic and Medicinal Chemistry</i> , 2009 , 17, 1214-21	3.4	53
1005	Carbonic anhydrase inhibitors. inhibition of cytosolic isozymes I and II and transmembrane, cancer-associated isozyme IX with anions. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2003 , 18, 403-6	5.6	53

1004	6-Triazolyl-substituted sulfocoumarins are potent, selective inhibitors of the tumor-associated carbonic anhydrases IX and XII. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014 , 24, 1256-60	2.9	52
1003	Glycosidic carbonic anhydrase IX inhibitors: a sweet approach against cancer. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 1419-26	3.4	52
1002	The extremophilic carbonic anhydrase (CA) from Sulfurihydrogenibium azorense, the fastest CA known, is highly activated by amino acids and amines. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013 , 23, 1087-90	2.9	52
1001	Carbonic anhydrase catalyzes cyanamide hydration to urea: is it mimicking the physiological reaction?. <i>Journal of Biological Inorganic Chemistry</i> , 1999 , 4, 528-36	3.7	52
1000	The carbonic anhydrase IX inhibitor SLC-0111 sensitises cancer cells to conventional chemotherapy. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 117-123	5.6	52
999	Deciphering the Mechanism of Human Carbonic Anhydrases Inhibition with Sulfocoumarins: Computational and Experimental Studies. <i>Chemistry - A European Journal</i> , 2018 , 24, 7840-7844	4.8	51
998	Sulfonamide inhibition studies of the β -carbonic anhydrase from the pathogenic bacterium <i>Vibrio cholerae</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 1115-20	3.4	51
997	A class of sulfonamides with strong inhibitory action against the β -carbonic anhydrase from <i>Trypanosoma cruzi</i> . <i>Journal of Medicinal Chemistry</i> , 2013 , 56, 5773-81	8.3	51
996	Discovery of New Selenoureido Analogues of 4-(4-Fluorophenylureido)benzenesulfonamide as Carbonic Anhydrase Inhibitors. <i>ACS Medicinal Chemistry Letters</i> , 2017 , 8, 963-968	4.3	51
995	Ureido-substituted sulfamates show potent carbonic anhydrase IX inhibitory and antiproliferative activities against breast cancer cell lines. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012 , 22, 4681-5	2.9	51
994	Carbonic anhydrase inhibitors. Inhibition and homology modeling studies of the fungal β -carbonic anhydrase from <i>Candida albicans</i> with sulfonamides. <i>Bioorganic and Medicinal Chemistry</i> , 2009 , 17, 4503-9	3.4	51
993	New azafluorenones with cytotoxic and carbonic anhydrase inhibitory properties: 2-Aryl-4-(4-hydroxyphenyl)-5H-indeno[1,2-b]pyridin-5-ones. <i>Bioorganic Chemistry</i> , 2018 , 81, 433-439	5.1	51
992	Reconsidering anion inhibitors in the general context of drug design studies of modulators of activity of the classical enzyme carbonic anhydrase. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 561-580	5.6	51
991	The history and rationale of using carbonic anhydrase inhibitors in the treatment of peptic ulcers. In memoriam Ioan Puia (1932-2015). <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 527-33	5.6	50
990	Cloning, expression and purification of the complete domain of the β -carbonic anhydrase from <i>Plasmodium falciparum</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 54-59	5.6	50
989	The α -carbonic anhydrase from the thermophilic bacterium <i>Sulfurihydrogenibium yellowstonense</i> YO3AOP1 is highly susceptible to inhibition by sulfonamides. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 1534-8	3.4	50
988	Simple methanesulfonates are hydrolyzed by the sulfatase carbonic anhydrase activity. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2012 , 27, 880-5	5.6	50
987	Anion inhibition studies of the β -carbonic anhydrase from the pathogenic bacterium <i>Vibrio cholerae</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013 , 23, 1636-8	2.9	50

986	Structure and inhibition studies of a type II beta-carbonic anhydrase psCA3 from <i>Pseudomonas aeruginosa</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 4831-4838	3.4	49
985	Dual-tail arylsulfone-based benzenesulfonamides differently match the hydrophobic and hydrophilic halves of human carbonic anhydrases active sites: Selective inhibitors for the tumor-associated hCA IX isoform. <i>European Journal of Medicinal Chemistry</i> , 2018 , 152, 1-9	6.8	49
984	Carbonic anhydrase inhibitors. Comparison of chlorthalidone and indapamide X-ray crystal structures in adducts with isozyme II: when three water molecules and the keto-enol tautomerism make the difference. <i>Journal of Medicinal Chemistry</i> , 2009 , 52, 322-8	8.3	49
983	The development of topically acting carbonic anhydrase inhibitors as anti-glaucoma agents. <i>Current Topics in Medicinal Chemistry</i> , 2007 , 7, 849-54	3	49
982	Phenols and Polyphenols as Carbonic Anhydrase Inhibitors. <i>Molecules</i> , 2016 , 21,	4.8	49
981	Sulfonamide inhibition studies of the β -class carbonic anhydrase from the malaria pathogen <i>Plasmodium falciparum</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 526-31	3.4	48
980	Inhibition studies of a beta-carbonic anhydrase from <i>Brucella suis</i> with a series of water soluble glycosyl sulfanilamides. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010 , 20, 2178-82	2.9	48
979	Synthesis and antimalarial activity of novel chiral and achiral benzenesulfonamides bearing 1, 3, 4-oxadiazole moieties. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2007 , 22, 301-8	5.6	48
978	Monothiocarbamates Strongly Inhibit Carbonic Anhydrases in Vitro and Possess Intraocular Pressure Lowering Activity in an Animal Model of Glaucoma. <i>Journal of Medicinal Chemistry</i> , 2016 , 59, 5857-67	8.3	47
977	Sulfonamide inhibition studies of the β -carbonic anhydrase from the diatom <i>Thalassiosira weissflogii</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014 , 24, 275-9	2.9	47
976	Structural insights into carbonic anhydrase IX isoform specificity of carbohydrate-based sulfamates. <i>Journal of Medicinal Chemistry</i> , 2014 , 57, 8635-45	8.3	47
975	Carbonic anhydrase inhibitors. Inhibition of the beta-class enzyme from the methanoarchaeon <i>Methanobacterium thermoautotrophicum</i> (Cab) with anions. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2004 , 14, 4563-7	2.9	47
974	Solution structure of MT _{nc} , a novel metallothionein from the Antarctic fish <i>Notothenia coriiceps</i> . <i>Structure</i> , 2003 , 11, 435-43	5.2	47
973	Carbonic anhydrases from <i>Trypanosoma</i> and <i>Leishmania</i> as anti-protozoan drug targets. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 1543-1555	3.4	46
972	Discovery of novel isatin-based sulfonamides with potent and selective inhibition of the tumor-associated carbonic anhydrase isoforms IX and XII. <i>Organic and Biomolecular Chemistry</i> , 2015 , 13, 6493-9	3.9	46
971	Sulfonamide inhibition studies of the β -carbonic anhydrase from the oral pathogen <i>Porphyromonas gingivalis</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014 , 24, 240-4	2.9	46
970	Carbonic anhydrase VII is S-glutathionylated without loss of catalytic activity and affinity for sulfonamide inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012 , 22, 1560-4	2.9	46
969	New chemotypes acting as isozyme-selective carbonic anhydrase inhibitors with low affinity for the offtarget cytosolic isoform II. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012 , 22, 2182-5	2.9	46

968	Analysis of saponins and phenolic compounds as inhibitors of α -carbonic anhydrase isoenzymes. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2013 , 28, 412-7	5.6	46
967	Carbonic anhydrase inhibitors: benzenesulfonamides incorporating cyanoacrylamide moieties are low nanomolar/subnanomolar inhibitors of the tumor-associated isoforms IX and XII. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 1396-403	3.4	46
966	Discovery of New Sulfonamide Carbonic Anhydrase IX Inhibitors Incorporating Nitrogenous Bases. <i>ACS Medicinal Chemistry Letters</i> , 2017 , 8, 1314-1319	4.3	46
965	Carbonic anhydrase inhibitors. Phenols incorporating 2- or 3-pyridyl-ethenylcarbonyl and tertiary amine moieties strongly inhibit <i>Saccharomyces cerevisiae</i> α -carbonic anhydrase. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2014 , 29, 495-9	5.6	46
964	Structural insights on carbonic anhydrase inhibitory action, isoform selectivity, and potency of sulfonamides and coumarins incorporating arylsulfonylureido groups. <i>Journal of Medicinal Chemistry</i> , 2014 , 57, 9152-67	8.3	46
963	Characterization and inhibition studies of an α -carbonic anhydrase from the endangered sturgeon species <i>Acipenser gueldenstaedti</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2011 , 26, 895-900	5.6	46
962	<i>Brucella</i> carbonic anhydrases: new targets for designing anti-infective agents. <i>Current Pharmaceutical Design</i> , 2010 , 16, 3310-6	3.3	46
961	Paraoxon, 4-nitrophenyl phosphate and acetate are substrates of β -but not of γ α -carbonic anhydrases. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010 , 20, 6208-12	2.9	46
960	Carbonic anhydrase inhibitors: X-ray crystallographic structure of the adduct of human isozyme II with a topically acting antiglaucoma sulfonamide. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2004 , 14, 2357-61	2.9	46
959	Carbonic anhydrase inhibitors: the first on-resin screening of a 4-sulfamoylphenylthiourea library. <i>Journal of Medicinal Chemistry</i> , 2004 , 47, 5224-9	8.3	46
958	Identification of genes expressed in response to phytoplasma infection in leaves of <i>Prunus armeniaca</i> by messenger RNA differential display. <i>Gene</i> , 2004 , 332, 29-34	3.8	46
957	Sulfonamide derivatives with protease inhibitory action as anticancer, anti-inflammatory and antiviral agents. <i>Expert Opinion on Therapeutic Patents</i> , 2002 , 12, 1307-1327	6.8	46
956	Supported ionic liquid membranes immobilized with carbonic anhydrases for CO ₂ transport at high temperatures. <i>Journal of Membrane Science</i> , 2017 , 528, 225-230	9.6	45
955	Synthesis of 6-tetrazolyl-substituted sulfocoumarins acting as highly potent and selective inhibitors of the tumor-associated carbonic anhydrase isoforms IX and XII. <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 1522-8	3.4	45
954	Hypoxia induced CA9 inhibitory targeting by two different sulfonamide derivatives including acetazolamide in human glioblastoma. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 3949-57	3.4	45
953	Sulfapyridine-like benzenesulfonamide derivatives as inhibitors of carbonic anhydrase isoenzymes I, II and VI. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2012 , 27, 818-24	5.6	45
952	Anion inhibition studies of the α -carbonic anhydrase from the protozoan pathogen <i>Trypanosoma cruzi</i> , the causative agent of Chagas disease. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 4472-6	3.4	45
951	Conformational variability of different sulfonamide inhibitors with thienyl-acetamido moieties attributes to differential binding in the active site of cytosolic human carbonic anhydrase isoforms. <i>Bioorganic and Medicinal Chemistry</i> , 2011 , 19, 3732-8	3.4	45

950	Inhibition studies of the κ carbonic anhydrases from the bacterial pathogen <i>Salmonella enterica</i> serovar Typhimurium with sulfonamides and sulfamates. <i>Bioorganic and Medicinal Chemistry</i> , 2011 , 19, 5023-30	3.4	45
949	Carbonic anhydrase inhibitors. Inhibition of transmembrane isoforms IX, XII, and XIV with less investigated anions including trithiocarbonate and dithiocarbamate. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010 , 20, 1548-50	2.9	45
948	Difference in hepatic metallothionein content in Antarctic red-blooded and haemoglobinless fish: undetectable metallothionein levels in haemoglobinless fish is accompanied by accumulation of untranslated metallothionein mRNA. <i>Biochemical Journal</i> , 1997 , 322 (Pt 1), 207-11	3.8	45
947	Carbonic anhydrase activators: activation of the human isoforms VII (cytosolic) and XIV (transmembrane) with amino acids and amines. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2007 , 17, 4107-12	2.9	45
946	Phosph(on)ate as a zinc-binding group in metalloenzyme inhibitors: X-ray crystal structure of the antiviral drug foscarnet complexed to human carbonic anhydrase I. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2007 , 17, 2210-5	2.9	45
945	Carbonic anhydrase inhibitors: inhibition of human, bacterial, and archaeal isozymes with benzene-1,3-disulfonamides--solution and crystallographic studies. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2007 , 17, 4201-7	2.9	45
944	Carbonic anhydrase activators: activation of isozyme XIII with amino acids and amines. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2006 , 16, 3955-9	2.9	45
943	Anion inhibition profiles of μ and κ carbonic anhydrases from the pathogenic bacterium <i>Vibrio cholerae</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 3413-7	3.4	45
942	PEGylated Bis-Sulfonamide Carbonic Anhydrase Inhibitors Can Efficiently Control the Growth of Several Carbonic Anhydrase IX-Expressing Carcinomas. <i>Journal of Medicinal Chemistry</i> , 2016 , 59, 5077-88	8.3	45
941	Inhibitory effects and structural insights for a novel series of coumarin-based compounds that selectively target human CA IX and CA XII carbonic anhydrases. <i>European Journal of Medicinal Chemistry</i> , 2018 , 143, 276-282	6.8	45
940	Discovery of β Adrenergic Receptors Blocker-Carbonic Anhydrase Inhibitor Hybrids for Multitargeted Antiglaucoma Therapy. <i>Journal of Medicinal Chemistry</i> , 2018 , 61, 5380-5394	8.3	45
939	Novel indolin-2-one-based sulfonamides as carbonic anhydrase inhibitors: Synthesis, in vitro biological evaluation against carbonic anhydrases isoforms I, II, IV and VII and molecular docking studies. <i>European Journal of Medicinal Chemistry</i> , 2017 , 127, 521-530	6.8	44
938	Protonography, a technique applicable for the analysis of κ carbonic anhydrase activity. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 920-4	5.6	44
937	Probing the 'bipolar' nature of the carbonic anhydrase active site: aromatic sulfonamides containing 1,3-oxazol-5-yl moiety as picomolar inhibitors of cytosolic CA I and CA II isoforms. <i>European Journal of Medicinal Chemistry</i> , 2015 , 101, 334-47	6.8	44
936	A novel library of saccharin and acesulfame derivatives as potent and selective inhibitors of carbonic anhydrase IX and XII isoforms. <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 1095-105	3.4	44
935	Carbonic anhydrase inhibition and the management of glaucoma: a literature and patent review 2013-2019. <i>Expert Opinion on Therapeutic Patents</i> , 2019 , 29, 781-792	6.8	44
934	Ethylene bis-imidazoles are highly potent and selective activators for isozymes VA and VII of carbonic anhydrase, with a potential nootropic effect. <i>Chemical Communications</i> , 2014 , 50, 5980-3	5.8	44
933	Anion inhibition studies of two new κ carbonic anhydrases from the bacterial pathogen <i>Legionella pneumophila</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014 , 24, 1127-32	2.9	44

932	Synthesis and evaluation of near-infrared fluorescent sulfonamide derivatives for imaging of hypoxia-induced carbonic anhydrase IX expression in tumors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012 , 22, 653-7	2.9	44
931	Inhibition of the β -carbonic anhydrases from <i>Mycobacterium tuberculosis</i> with C-cinnamoyl glycosides: identification of the first inhibitor with anti-mycobacterial activity. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013 , 23, 740-3	2.9	44
930	Pharmacological inhibition of carbonic anhydrase XII interferes with cell proliferation and induces cell apoptosis in T-cell lymphomas. <i>Cancer Letters</i> , 2013 , 333, 76-88	9.9	44
929	A class of 4-sulfamoylphenyl- β -aminoalkyl ethers with effective carbonic anhydrase inhibitory action and antiglaucoma effects. <i>Journal of Medicinal Chemistry</i> , 2014 , 57, 9673-86	8.3	44
928	Carbonic anhydrase inhibitors: Synthesis, molecular docking, cytotoxic and inhibition of the human carbonic anhydrase isoforms I, II, IX, XII with novel benzenesulfonamides incorporating pyrrole, pyrrolopyrimidine and fused pyrrolopyrimidine moieties. <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 3684-95	3.4	44
927	Molecular cloning, characterization, and inhibition studies of a β -carbonic anhydrase from <i>Malassezia globosa</i> , a potential antidandruff target. <i>Journal of Medicinal Chemistry</i> , 2012 , 55, 3513-20	8.3	44
926	Carbonic anhydrase activators: activation of the human tumor-associated isozymes IX and XII with amino acids and amines. <i>Bioorganic and Medicinal Chemistry</i> , 2008 , 16, 3530-6	3.4	44
925	Carbonic anhydrase inhibitors. Inhibition of the beta-class enzyme from the yeast <i>Saccharomyces cerevisiae</i> with anions. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008 , 18, 6327-31	2.9	44
924	Structure activity study of carbonic anhydrase IX: Selective inhibition with ureido-substituted benzenesulfonamides. <i>European Journal of Medicinal Chemistry</i> , 2017 , 132, 184-191	6.8	43
923	Inhibition studies of quinazoline-sulfonamide derivatives against the β CA (PgiCA) from the pathogenic bacterium, <i>Porphyromonas gingivalis</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 592-6	5.6	43
922	Microwave-assisted extraction, HPLC analysis, and inhibitory effects on carbonic anhydrase I, II, VA, and VII isoforms of 14 blueberry Italian cultivars. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1-6	5.6	43
921	Development of potent carbonic anhydrase inhibitors incorporating both sulfonamide and sulfamide groups. <i>Journal of Medicinal Chemistry</i> , 2012 , 55, 6776-83	8.3	43
920	Sperm from sneaker male squids exhibit chemotactic swarming to CO ₂ . <i>Current Biology</i> , 2013 , 23, 775-81	6.3	43
919	Mono-/dihydroxybenzoic acid esters and phenol pyridinium derivatives as inhibitors of the mammalian carbonic anhydrase isoforms I, II, VII, IX, XII and XIV. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 1564-9	3.4	43
918	Carbonic anhydrase activators: gold nanoparticles coated with derivatized histamine, histidine, and carnosine show enhanced activatory effects on several mammalian isoforms. <i>Journal of Medicinal Chemistry</i> , 2011 , 54, 1170-7	8.3	43
917	Carbonic anhydrase inhibitors. Interaction of 2-(hydrazinocarbonyl)-3-phenyl-1H-indole-5-sulfonamide with 12 mammalian isoforms: kinetic and X-ray crystallographic studies. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008 , 18, 152-8	2.9	43
916	Carbonic anhydrase inhibitors: synthesis and inhibition of cytosolic/tumor-associated carbonic anhydrase isozymes I, II, IX, and XII with N-hydroxysulfamides--a new zinc-binding function in the design of inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2005 , 15, 2353-8	2.9	43
915	Lansoprazole and carbonic anhydrase IX inhibitors synergize against human melanoma cells. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 119-125	5.6	43

914	Synthesis of 4-(thiazol-2-ylamino)-benzenesulfonamides with carbonic anhydrase I, II and IX inhibitory activity and cytotoxic effects against breast cancer cell lines. <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 3043-3051	3.4	43
913	Synthesis and biological evaluation of novel aromatic and heterocyclic bis-sulfonamide Schiff bases as carbonic anhydrase I, II, VII and IX inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 3093-3097	3.4	42
912	Selenols: a new class of carbonic anhydrase inhibitors. <i>Chemical Communications</i> , 2019 , 55, 648-651	5.8	42
911	Carbonic anhydrases from <i>Trypanosoma cruzi</i> and <i>Leishmania donovani</i> chagasi are inhibited by benzoxaboroles. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 286-289	5.6	42
910	Comparison of the sulfonamide inhibition profiles of the β and γ carbonic anhydrases from the pathogenic bacterium <i>Vibrio cholerae</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016 , 26, 1941-6	2.9	42
909	Inhibition of carbonic anhydrases from the extremophilic bacteria <i>Sulfolobus solfataricus</i> (SspCA) and <i>S. azorensis</i> (SazCA) with a new series of sulfonamides incorporating aroyldiazone-, [1,2,4]triazolo[3,4-b][1,3,4]thiadiazinyl- or 2-(arylamino)-1,3,4-thioxane-5-carboxamide-4,5,6-trimethyl-2(1H)-thione. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 1093-1102	3.4	42
908	Anion inhibition studies of a β -carbonic anhydrase from <i>Clostridium perfringens</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013 , 23, 6706-10	2.9	42
907	Isatin: a privileged scaffold for the design of carbonic anhydrase inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 68-73	5.6	42
906	Identification of 3,4-Dihydroisoquinoline-2(1H)-sulfonamides as potent carbonic anhydrase inhibitors: synthesis, biological evaluation, and enzyme–ligand X-ray studies. <i>Journal of Medicinal Chemistry</i> , 2010 , 53, 2401-8	8.3	42
905	Carbonic anhydrase inhibitors: X-ray crystallographic studies for the binding of N-substituted benzenesulfonamides to human isoform II. <i>Chemical Communications</i> , 2011 , 47, 11636-8	5.8	42
904	Carbonic anhydrase inhibitors. Inhibition of the fungal beta-carbonic anhydrases from <i>Candida albicans</i> and <i>Cryptococcus neoformans</i> with boronic acids. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009 , 19, 2642-5	2.9	42
903	Synthesis and crystallographic analysis of new sulfonamides incorporating NO-donating moieties with potent antiglaucoma action. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011 , 21, 3216-21	2.9	42
902	Is cyanate a carbonic anhydrase substrate?. <i>Proteins: Structure, Function and Bioinformatics</i> , 1997 , 27, 272-8	4.2	42
901	Carbonic anhydrase activators: the first activation study of the human secretory isoform VI with amino acids and amines. <i>Bioorganic and Medicinal Chemistry</i> , 2007 , 15, 5351-7	3.4	42
900	Carbonic anhydrase inhibitors. Inhibition of the newly isolated murine isozyme XIII with anions. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2004 , 14, 5435-9	2.9	42
899	Mechanism of cyanamide hydration catalyzed by carbonic anhydrase II suggested by cryogenic X-ray diffraction. <i>Biochemistry</i> , 2000 , 39, 12391-7	3.2	42
898	Tumor-associated carbonic anhydrase isoform IX and XII inhibitory properties of certain isatin-bearing sulfonamides endowed with in vitro antitumor activity towards colon cancer. <i>Bioorganic Chemistry</i> , 2018 , 81, 425-432	5.1	42
897	Discovery of 4-Hydroxy-3-(3-(phenylureido)benzenesulfonamides as SLC-0111 Analogues for the Treatment of Hypoxic Tumors Overexpressing Carbonic Anhydrase IX. <i>Journal of Medicinal Chemistry</i> , 2018 , 61, 6328-6338	8.3	42

896	The effects of some avermectins on bovine carbonic anhydrase enzyme. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 773-8	5.6	4 ¹
895	Inhibition of acetylcholinesterase and butyrylcholinesterase with uracil derivatives: kinetic and computational studies. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 429-437	5.6	4 ¹
894	Synthesis of 4-[2-(3,4-dimethoxybenzyl)cyclopentyl]-1,2-dimethoxybenzene Derivatives and Evaluations of Their Carbonic Anhydrase Isoenzymes Inhibitory Effects. <i>Chemical Biology and Drug Design</i> , 2016 , 87, 594-607	2.9	4 ¹
893	Structure-based screening for the discovery of new carbonic anhydrase VII inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2014 , 71, 105-11	6.8	4 ¹
892	Sulfonamide inhibition studies of two carbonic anhydrases from the bacterial pathogen <i>Legionella pneumophila</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 2939-46	3.4	4 ¹
891	Carbonic anhydrase inhibitory activity of sulfonamides and carboxylic acids incorporating cyclic imide scaffolds. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014 , 24, 5185-9	2.9	4 ¹
890	Carbonic Anhydrase Inhibition with Benzenesulfonamides and Tetrafluorobenzenesulfonamides Obtained via Click Chemistry. <i>ACS Medicinal Chemistry Letters</i> , 2014 , 5, 927-30	4.3	4 ¹
889	Synthesis and biological evaluation of histamine Schiff bases as carbonic anhydrase I, II, IV, VII, and IX activators. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 1305-1312	5.6	4 ¹
888	Carbonic anhydrase activators: an activation study of the human mitochondrial isoforms VA and VB with amino acids and amines. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2007 , 17, 1336-40	2.9	4 ¹
887	Carbonic anhydrase inhibitors: synthesis and inhibition of cytosolic/tumor-associated carbonic anhydrase isozymes I, II, and IX with bis-sulfamates. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2005 , 15, 579-84	2.9	4 ¹
886	Experimental Carbonic Anhydrase Inhibitors for the Treatment of Hypoxic Tumors. <i>Journal of Experimental Pharmacology</i> , 2020 , 12, 603-617	3	4 ¹
885	Emerging role of carbonic anhydrase inhibitors. <i>Clinical Science</i> , 2021 , 135, 1233-1249	6.5	4 ¹
884	Discovery of New Potential Anti-Infective Compounds Based on Carbonic Anhydrase Inhibitors by Rational Target-Focused Repurposing Approaches. <i>ChemMedChem</i> , 2016 , 11, 1904-14	3.7	4 ¹
883	Continued exploration of 1,2,4-oxadiazole periphery for carbonic anhydrase-targeting primary arene sulfonamides: Discovery of subnanomolar inhibitors of membrane-bound hCA IX isoform that selectively kill cancer cells in hypoxic environment. <i>European Journal of Medicinal Chemistry</i> , 2019 , 184, 92-105	6.8	4 ¹
882	Synthesis, characterisation, biological evaluation and studies of sulphonamide Schiff bases. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 950-962	5.6	4 ¹
881	Nanoemulsions of sulfonamide carbonic anhydrase inhibitors strongly inhibit the growth of <i>Trypanosoma cruzi</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 139-146	5.6	4 ¹
880	4-Hydroxy-3-nitro-5-ureido-benzenesulfonamides Selectively Target the Tumor-Associated Carbonic Anhydrase Isoforms IX and XII Showing Hypoxia-Enhanced Antiproliferative Profiles. <i>Journal of Medicinal Chemistry</i> , 2018 , 61, 10860-10874	8.3	4 ¹
879	Rethinking the Combination of Proton Exchanger Inhibitors in Cancer Therapy. <i>Metabolites</i> , 2017 , 8,	5.6	4 ¹

878	Structure-Activity Relationship for Sulfonamide Inhibition of Helicobacter pylori β -Carbonic Anhydrase. <i>Journal of Medicinal Chemistry</i> , 2016 , 59, 11098-11109	8.3	40
877	4-Functionalized 1,3-diarylpyrazoles bearing benzenesulfonamide moiety as selective potent inhibitors of the tumor associated carbonic anhydrase isoforms IX and XII. <i>European Journal of Medicinal Chemistry</i> , 2014 , 76, 284-90	6.8	40
876	Carbonic anhydrase regulation and CO(2) sensing in the fungal pathogen <i>Candida glabrata</i> involves a novel Rca1p ortholog. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 1549-54	3.4	40
875	Cloning, polymorphism, and inhibition of beta-carbonic anhydrase of <i>Helicobacter pylori</i> . <i>Journal of Gastroenterology</i> , 2008 , 43, 849-57	6.9	40
874	Malarial parasite carbonic anhydrase and its inhibitors. <i>Current Topics in Medicinal Chemistry</i> , 2007 , 7, 909-17	3	40
873	Inhibition of Bacterial Carbonic Anhydrases as a Novel Approach to Escape Drug Resistance. <i>Current Topics in Medicinal Chemistry</i> , 2017 , 17, 1237-1248	3	40
872	A substituted sulfonamide and its Co (II), Cu (II), and Zn (II) complexes as potential antifungal agents. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 51-62	5.6	40
871	Synthesis, cytotoxicity and carbonic anhydrase inhibitory activities of new pyrazolines. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 20-24	5.6	40
870	Synthesis and bioactivities of halogen bearing phenolic chalcones and their corresponding bis Mannich bases. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 125-131	5.6	40
869	SLC-0111 enaminone analogs, 3/4-(3-aryl-3-oxopropenyl) aminobenzenesulfonamides, as novel selective subnanomolar inhibitors of the tumor-associated carbonic anhydrase isoform IX. <i>Bioorganic Chemistry</i> , 2019 , 83, 549-558	5.1	40
868	Prostate cancer cells and exosomes in acidic condition show increased carbonic anhydrase IX expression and activity. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 272-278	5.6	40
867	Design, synthesis and evaluation of F-labeled cationic carbonic anhydrase IX inhibitors for PET imaging. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 722-730	5.6	39
866	The Possible Role of in Gastric Cancer and Its Management. <i>Frontiers in Oncology</i> , 2019 , 9, 75	5.3	39
865	Synthesis and carbonic anhydrase inhibitory activities of new thienyl-substituted pyrazoline benzenesulfonamides. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1-5	5.6	39
864	Novel hydrazido benzenesulfonamides-isatin conjugates: Synthesis, carbonic anhydrase inhibitory activity and molecular modeling studies. <i>European Journal of Medicinal Chemistry</i> , 2018 , 157, 28-36	6.8	39
863	Effect of a recombinant manganese superoxide dismutase on prevention of contrast-induced acute kidney injury. <i>Clinical and Experimental Nephrology</i> , 2014 , 18, 424-31	2.5	39
862	Synthesis and carbonic anhydrase I, II, VII, and IX inhibition studies with a series of benzo[d]thiazole-5- and 6-sulfonamides. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 1071-1078	5.6	39
861	Open saccharin-based secondary sulfonamides as potent and selective inhibitors of cancer-related carbonic anhydrase IX and XII isoforms. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 51-59	5.6	39

860	Protonography, a powerful tool for analyzing the activity and the oligomeric state of the α -carbonic anhydrase identified in the genome of <i>Porphyrromonas gingivalis</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 3747-50	3.4	39
859	The structural comparison between membrane-associated human carbonic anhydrases provides insights into drug design of selective inhibitors. <i>Biopolymers</i> , 2014 , 101, 769-78	2.2	39
858	Carbonic anhydrase inhibitors. Inhibition of the beta-class enzyme from the pathogenic yeast <i>Candida glabrata</i> with anions. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009 , 19, 4802-5	2.9	39
857	Evaluation of selenide, diselenide and selenoheterocycle derivatives as carbonic anhydrase I, II, IV, VII and IX inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 2518-2523	3.4	38
856	Discovery of Benzenesulfonamides with Potent Human Carbonic Anhydrase Inhibitory and Effective Anticonvulsant Action: Design, Synthesis, and Pharmacological Assessment. <i>Journal of Medicinal Chemistry</i> , 2017 , 60, 2456-2469	8.3	38
855	Exploring new Probenecid-based carbonic anhydrase inhibitors: Synthesis, biological evaluation and docking studies. <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 5311-8	3.4	38
854	Inhibition of human carbonic anhydrase isozymes I, II, IX and XII with a new series of sulfonamides incorporating aroylhydrazone-, [1,2,4]triazolo[3,4-b][1,3,4]thiadiazinyl- or 2-(cyanophenylmethylene)-1,3,4-thiadiazol-3(2H)-yl moieties. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 52-6	5.6	38
853	Design and synthesis of novel 1,3-diaryltriazene-substituted sulfonamides as potent and selective carbonic anhydrase II inhibitors. <i>Bioorganic Chemistry</i> , 2018 , 77, 542-547	5.1	38
852	Cloning, characterization and anion inhibition studies of a β -carbonic anhydrase from the Antarctic bacterium <i>Colwellia psychrerythraea</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 835-40	3.4	38
851	Sulfonamides incorporating fluorine and 1,3,5-triazine moieties are effective inhibitors of three β -class carbonic anhydrases from <i>Mycobacterium tuberculosis</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2014 , 29, 686-9	5.6	38
850	Carbonic anhydrase inhibitors: inhibition of the β -class enzyme from the pathogenic yeast <i>Candida glabrata</i> with sulfonamides, sulfamates and sulfamides. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013 , 23, 2647-52	2.9	38
849	3D-QSAR CoMFA studies on sulfonamide inhibitors of the Rv3588c β -carbonic anhydrase from <i>Mycobacterium tuberculosis</i> and design of not yet synthesized new molecules. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2014 , 29, 449-55	5.6	38
848	Adaptive evolution and functional divergence of pepsin gene family. <i>Gene</i> , 2004 , 333, 81-90	3.8	38
847	Carbonic anhydrase inhibitors: X-ray crystal structure of a benzenesulfonamide strong CA II and CA IX inhibitor bearing a pentafluorophenylaminothioureido tail in complex with isozyme II. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2005 , 15, 1937-42	2.9	38
846	Microwave-assisted synthesis and bioevaluation of new sulfonamides. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 369-374	5.6	37
845	Benzoxaboroles as Efficient Inhibitors of the β -Carbonic Anhydrases from Pathogenic Fungi: Activity and Modeling Study. <i>ACS Medicinal Chemistry Letters</i> , 2017 , 8, 1194-1198	4.3	37
844	pH regulators to target the tumor immune microenvironment in human hepatocellular carcinoma. <i>Oncotmunology</i> , 2018 , 7, e1445452	7.2	37
843	Heterocyclic periphery in the design of carbonic anhydrase inhibitors: 1,2,4-Oxadiazol-5-yl benzenesulfonamides as potent and selective inhibitors of cytosolic hCA II and membrane-bound hCA IX isoforms. <i>Bioorganic Chemistry</i> , 2018 , 76, 88-97	5.1	37

842	Discovery of Novel Nonsteroidal Anti-Inflammatory Drugs and Carbonic Anhydrase Inhibitors Hybrids (NSAIDs-CAIs) for the Management of Rheumatoid Arthritis. <i>Journal of Medicinal Chemistry</i> , 2018 , 61, 4961-4977	8.3	37
841	Benzenesulfonamide bearing 1,2,4-triazole scaffolds as potent inhibitors of tumor associated carbonic anhydrase isoforms hCA IX and hCA XII. <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 1873-82	3.4	37
840	Cyclic tertiary sulfamates: selective inhibition of the tumor-associated carbonic anhydrases IX and XII by N- and O-substituted acesulfame derivatives. <i>European Journal of Medicinal Chemistry</i> , 2014 , 84, 240-6	6.8	37
839	Salen and tetrahydrosalen derivatives act as effective inhibitors of the tumor-associated carbonic anhydrase XII--a new scaffold for designing isoform-selective inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013 , 23, 6759-63	2.9	37
838	Restoring catalytic activity to the human carbonic anhydrase (CA) related proteins VIII, X and XI affords isoforms with high catalytic efficiency and susceptibility to anion inhibition. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013 , 23, 256-60	2.9	37
837	Characterization of carbonic anhydrase IX interactome reveals proteins assisting its nuclear localization in hypoxic cells. <i>Journal of Proteome Research</i> , 2013 , 12, 282-92	5.6	37
836	Synthesis, characterization and biological studies of sulfonamide Schiff's bases and some of their metal derivatives. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2012 , 27, 58-68	5.6	37
835	Promiscuity of carbonic anhydrase II. Unexpected ester hydrolysis of carbohydrate-based sulfamate inhibitors. <i>Journal of the American Chemical Society</i> , 2011 , 133, 18452-62	16.4	37
834	Crystal structure of the bovine alpha-chymotrypsin:Kunitz inhibitor complex. An example of multiple protein:protein recognition sites. <i>Journal of Molecular Recognition</i> , 1997 , 10, 26-35	2.6	37
833	Structural and functional analysis of metal regulatory elements in the promoter region of genes encoding metallothionein isoforms in the Antarctic fish <i>Chionodraco hamatus</i> (icefish). <i>Gene</i> , 2001 , 274, 199-208	3.8	37
832	Structural Basis for the Inhibition of <i>Helicobacter pylori</i> β -Carbonic Anhydrase by Sulfonamides. <i>PLoS ONE</i> , 2015 , 10, e0127149	3.7	37
831	<i>Legionella pneumophila</i> Carbonic Anhydrases: Underexplored Antibacterial Drug Targets. <i>Pathogens</i> , 2016 , 5,	4.5	37
830	Investigation of arenesulfonyl-2-imidazolidinones as potent carbonic anhydrase inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 81-4	5.6	36
829	Structural investigations on coumarins leading to chromeno[4,3-c]pyrazol-4-ones and pyrano[4,3-c]pyrazol-4-ones: New scaffolds for the design of the tumor-associated carbonic anhydrase isoforms IX and XII. <i>European Journal of Medicinal Chemistry</i> , 2018 , 146, 47-59	6.8	36
828	Computational investigation of the selectivity of salen and tetrahydrosalen compounds towards the tumor-associated hCA XII isozyme. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 114-8	5.6	36
827	Chromone containing sulfonamides as potent carbonic anhydrase inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2012 , 27, 744-7	5.6	36
826	Development of small molecule carbonic anhydrase IX inhibitors. <i>BJU International</i> , 2008 , 101 Suppl 4, 39-40	5.6	36
825	Carbonic anhydrase inhibitors: cloning and sulfonamide inhibition studies of a carboxyterminal truncated alpha-carbonic anhydrase from <i>Helicobacter pylori</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2006 , 16, 2182-8	2.9	36

- 824 Hydroxyurea is a carbonic anhydrase inhibitor. *Bioorganic and Medicinal Chemistry*, **2003**, 11, 2241-6 3.4 36
- 823 Antibacterial carbonic anhydrase inhibitors: an update on the recent literature. *Expert Opinion on Therapeutic Patents*, **2020**, 30, 963-982 6.8 36
- 822 Direct biocatalysed synthesis of first sulfur-, selenium- and tellurium- containing l-ascorbyl hybrid derivatives with radical trapping and GPx-like properties. *Chemical Communications*, **2019**, 55, 5705-5708^{5.8} 35
- 821 Sulfonamide Inhibitors of Human Carbonic Anhydrases Designed through a Three-Tails Approach: Improving Ligand/Isoform Matching and Selectivity of Action. *Journal of Medicinal Chemistry*, **2020**, 63, 7422-7444 8.3 35
- 820 Quinazoline-sulfonamides with potent inhibitory activity against the β -carbonic anhydrase from *Vibrio cholerae*. *Bioorganic and Medicinal Chemistry*, **2014**, 22, 5133-40 3.4 35
- 819 Crystal structures of two tetrameric β -carbonic anhydrases from the filamentous ascomycete *Sordaria macrospora*. *FEBS Journal*, **2014**, 281, 1759-72 5.7 35
- 818 Heavy metal ion inhibition studies of human, sheep and fish β -carbonic anhydrases. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2013**, 28, 278-82 5.6 35
- 817 Natural extracellular nanovesicles and photodynamic molecules: is there a future for drug delivery?. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2017**, 32, 908-916 5.6 35
- 816 Structure-Activity Relationships of Benzenesulfonamide-Based Inhibitors towards Carbonic Anhydrase Isoform Specificity. *ChemBioChem*, **2017**, 18, 213-222 3.8 35
- 815 Carbonic anhydrase inhibitors. Aromatic/heterocyclic sulfonamides incorporating phenacetyl, pyridylacetyl and thienylacetyl tails act as potent inhibitors of human mitochondrial isoforms VA and VB. *Bioorganic and Medicinal Chemistry*, **2009**, 17, 4894-9 3.4 35
- 814 Carbonic anhydrase inhibitors. Inhibition of cytosolic isoforms I, II, III, VII and XIII with less investigated inorganic anions. *Bioorganic and Medicinal Chemistry Letters*, **2009**, 19, 1855-7 2.9 35
- 813 Inhibition of the R1 fragment of the cadmium-containing zeta-class carbonic anhydrase from the diatom *Thalassiosira weissflogii* with anions. *Bioorganic and Medicinal Chemistry Letters*, **2010**, 20, 4745-8^{2.9} 35
- 812 Carbonic anhydrase inhibitors: binding of an antiglaucoma glycosyl-sulfanilamide derivative to human isoform II and its consequences for the drug design of enzyme inhibitors incorporating sugar moieties. *Bioorganic and Medicinal Chemistry Letters*, **2007**, 17, 1726-31 2.9 35
- 811 Synthesis of novel acyl selenoureido benzenesulfonamides as carbonic anhydrase I, II, VII and IX inhibitors. *Bioorganic and Medicinal Chemistry*, **2017**, 25, 3567-3573 3.4 34
- 810 Inhibition of *Malassezia globosa* carbonic anhydrase with phenols. *Bioorganic and Medicinal Chemistry*, **2017**, 25, 2577-2582 3.4 34
- 809 A New Kid on the Block? Carbonic Anhydrases as Possible New Targets in Alzheimer's Disease. *International Journal of Molecular Sciences*, **2019**, 20, 6.3 34
- 808 New phenolic Mannich bases with piperazines and their bioactivities. *Bioorganic Chemistry*, **2019**, 90, 103057 5.1 34
- 807 Plasmonic Particles that Hit Hypoxic Cells. *Advanced Functional Materials*, **2015**, 25, 316-323 15.6 34

806	Synthesis of a new series of dithiocarbamates with effective human carbonic anhydrase inhibitory activity and antiglaucoma action. <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 2368-76	3.4	34
805	Designing carbonic anhydrase inhibitors for the treatment of breast cancer. <i>Expert Opinion on Drug Discovery</i> , 2015 , 10, 591-7	6.2	34
804	Discovery of 1,1'-Biphenyl-4-sulfonamides as a New Class of Potent and Selective Carbonic Anhydrase XIV Inhibitors. <i>Journal of Medicinal Chemistry</i> , 2015 , 58, 8564-72	8.3	34
803	The inhibitory effects of phenolic Mannich bases on carbonic anhydrase I and II isoenzymes. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1678-81	5.6	34
802	Selective inhibition of human carbonic anhydrases by novel amide derivatives of probenecid: synthesis, biological evaluation and molecular modelling studies. <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 3982-8	3.4	34
801	Designing, synthesis and bioactivities of 4-[3-(4-hydroxyphenyl)-5-aryl-4,5-dihydro-pyrazol-1-yl]benzenesulfonamides. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 169-175	5.6	34
800	The first example of a significant active site conformational rearrangement in a carbonic anhydrase-inhibitor adduct: the carbonic anhydrase I-topiramate complex. <i>Organic and Biomolecular Chemistry</i> , 2010 , 8, 3528-33	3.9	34
799	Molecular modeling study for the binding of zonisamide and topiramate to the human mitochondrial carbonic anhydrase isoform VA. <i>Bioorganic and Medicinal Chemistry</i> , 2007 , 15, 4152-8	3.4	34
798	Carbonic anhydrase inhibitors. Interaction of the antiepileptic drug sulthiame with twelve mammalian isoforms: kinetic and X-ray crystallographic studies. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2007 , 17, 4866-72	2.9	34
797	Protease inhibitors: synthesis of a series of bacterial collagenase inhibitors of the sulfonyl amino acyl hydroxamate type. <i>Journal of Medicinal Chemistry</i> , 2001 , 44, 2253-8	8.3	34
796	A Combined Crystallographic and Theoretical Study Explains the Capability of Carboxylic Acids to Adopt Multiple Binding Modes in the Active Site of Carbonic Anhydrases. <i>Chemistry - A European Journal</i> , 2016 , 22, 97-100	4.8	34
795	Novel sulfonamide bearing coumarin scaffolds as selective inhibitors of tumor associated carbonic anhydrase isoforms IX and XII. <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 2882-2886	3.4	34
794	Cloning, expression, purification and sulfonamide inhibition profile of the complete domain of the β -carbonic anhydrase from <i>Plasmodium falciparum</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016 , 26, 4184-90	2.9	34
793	Dithiocarbamates effectively inhibit the β -carbonic anhydrase from the dandruff-producing fungus <i>Malassezia globosa</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 1260-1265	3.4	33
792	Synthesis of 6-aryl-substituted sulfocoumarins and investigation of their carbonic anhydrase inhibitory action. <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 1430-6	3.4	33
791	Sulfonamide bearing pyrazolylpyrazolines as potent inhibitors of carbonic anhydrase isoforms I, II, IX and XII. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015 , 25, 3208-12	2.9	33
790	<i>Drosophila melanogaster</i> : a model organism for controlling Dipteran vectors and pests. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 505-13	5.6	33
789	Carbonic Anhydrase from <i>Porphyromonas Gingivalis</i> as a Drug Target. <i>Pathogens</i> , 2017 , 6,	4.5	33

788	Anticancer effects of new dibenzenesulfonamides by inducing apoptosis and autophagy pathways and their carbonic anhydrase inhibitory effects on hCA I, hCA II, hCA IX, hCA XII isoenzymes. <i>Bioorganic Chemistry</i> , 2018 , 78, 290-297	5.1	33
787	Kinetic and anion inhibition studies of a β -carbonic anhydrase (FbiCA 1) from the C4 plant <i>Flaveria bidentis</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013 , 23, 1626-30	2.9	33
786	New pyrazolo[4,3-e][1,2,4]triazine sulfonamides as carbonic anhydrase inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 3674-80	3.4	33
785	Dual inhibitors for aspartic proteases HIV-1 PR and renin: advancements in AIDS-hypertension-diabetes linkage via molecular dynamics, inhibition assays, and binding free energy calculations. <i>Journal of Medicinal Chemistry</i> , 2012 , 55, 5784-96	8.3	33
784	Carbonic anhydrase inhibitors. Phenacetyl-, pyridylacetyl- and thienylacetyl-substituted aromatic sulfonamides act as potent and selective isoform VII inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009 , 19, 3170-3	2.9	33
783	Carbonic anhydrase inhibitors. Inhibition of transmembrane isozymes XII (cancer-associated) and XIV with anions. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2007 , 17, 1532-7	2.9	33
782	Purification and characterization of pepsins A1 and A2 from the Antarctic rock cod <i>Trematomus bernacchii</i> . <i>FEBS Journal</i> , 2007 , 274, 6152-66	5.7	33
781	Carbonic anhydrase activators: activation of the archaeal beta-class (Cab) and gamma-class (Cam) carbonic anhydrases with amino acids and amines. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008 , 18, 6194-8	2.9	33
780	Isolation and primary structure determination of a metallothionein from <i>Paracentrotus lividus</i> (Echinodermata, Echinoidea). <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 1995 , 111, 329-36	2.3	33
779	Dual Cyclooxygenase and Carbonic Anhydrase Inhibition by Nonsteroidal Anti-Inflammatory Drugs for the Treatment of Cancer. <i>Current Medicinal Chemistry</i> , 2015 , 22, 2812-8	4.3	33
778	3H-1,2-benzoxathiepine 2,2-dioxides: a new class of isoform-selective carbonic anhydrase inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 767-775	5.6	32
777	Synthesis of coumarin-sulfonamide derivatives and determination of their cytotoxicity, carbonic anhydrase inhibitory and molecular docking studies. <i>European Journal of Medicinal Chemistry</i> , 2019 , 183, 111702	6.8	32
776	Synthesis, biological activity and multiscale molecular modeling studies of bis-coumarins as selective carbonic anhydrase IX and XII inhibitors with effective cytotoxicity against hepatocellular carcinoma. <i>Bioorganic Chemistry</i> , 2019 , 87, 838-850	5.1	32
775	Exploring carbonic anhydrase inhibition with multimeric coumarins displayed on a fullerene scaffold. <i>Organic and Biomolecular Chemistry</i> , 2015 , 13, 7445-51	3.9	32
774	Sulfonamide inhibition studies of the β -carbonic anhydrase from the Antarctic cyanobacterium <i>Nostoc commune</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 1728-34	3.4	32
773	Synthesis and carbonic anhydrase inhibitory properties of novel chalcone substituted benzenesulfonamides. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016 , 26, 5867-5870	2.9	32
772	4-Arylbenzenesulfonamides as Human Carbonic Anhydrase Inhibitors (hCAIs): Synthesis by Pd Nanocatalyst-Mediated Suzuki-Miyaura Reaction, Enzyme Inhibition, and X-ray Crystallographic Studies. <i>Journal of Medicinal Chemistry</i> , 2016 , 59, 721-32	8.3	32
771	Development of certain new 2-substituted-quinazolin-4-yl-aminobenzenesulfonamide as potential antitumor agents. <i>European Journal of Medicinal Chemistry</i> , 2016 , 109, 247-53	6.8	32

770	Sulfonamide inhibition study of the carbonic anhydrases from the bacterial pathogen <i>Porphyromonas gingivalis</i> : the β -class (PgiCAB) versus the α -class (PgiCA) enzymes. <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 4537-43	3.4	32
769	Synthesis of Novel Selenides Bearing Benzenesulfonamide Moieties as Carbonic Anhydrase I, II, IV, VII, and IX Inhibitors. <i>ACS Medicinal Chemistry Letters</i> , 2017 , 8, 1213-1217	4.3	32
768	Tricyclic sulfonamides incorporating benzothioapyrano[4,3-c]pyrazole and pyridothioapyrano[4,3-c]pyrazole effectively inhibit β - and α -carbonic anhydrase: X-ray crystallography and solution investigations on 15 isoforms. <i>Journal of Medicinal Chemistry</i> , 2012 , 55, 9619-29	8.3	32
767	Kinetic study of a novel thermo-stable β -carbonic anhydrase for biomimetic CO ₂ capture. <i>Enzyme and Microbial Technology</i> , 2013 , 53, 271-7	3.8	32
766	Carbonic anhydrase inhibitors. Cloning, characterization and inhibition studies of the cytosolic isozyme III with anions. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2009 , 24, 70-6	5.6	32
765	Differential display analysis of gene expression in Etrog citron leaves infected by Citrus viroid III. <i>Biochimica Et Biophysica Acta Gene Regulatory Mechanisms</i> , 2007 , 1769, 228-35		32
764	Carbonic anhydrase inhibitors. Inhibition studies of the human secretory isoform VI with anions. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2007 , 17, 1037-42	2.9	32
763	Identification of cadmium-sensitive genes in the Antarctic fish <i>Chionodraco hamatus</i> by messenger RNA differential display. <i>Gene</i> , 2002 , 299, 117-24	3.8	32
762	Coral Carbonic Anhydrases: Regulation by Ocean Acidification. <i>Marine Drugs</i> , 2016 , 14,	6	32
761	Discovery of new ureido benzenesulfonamides incorporating 1,3,5-triazine moieties as carbonic anhydrase I, II, IX and XII inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2019 , 27, 1588-1594	3.4	32
760	Design, synthesis and biological evaluation of novel ureido benzenesulfonamides incorporating 1,3,5-triazine moieties as potent carbonic anhydrase IX inhibitors. <i>Bioorganic Chemistry</i> , 2019 , 82, 117-122	5.1	32
759	New natural product carbonic anhydrase inhibitors incorporating phenol moieties. <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 7219-25	3.4	31
758	Carbonic anhydrase modulation of emotional memory. Implications for the treatment of cognitive disorders. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 1206-1214	5.6	31
757	Carbonic anhydrase inhibition and cytotoxicity studies of Mannich base derivatives of thymol. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1375-80	5.6	31
756	Inhibition of carbonic anhydrase isoforms I, II, IV, VII and XII with carboxylates and sulfonamides incorporating phthalimide/phthalic anhydride scaffolds. <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 20-5	3.4	31
755	Carbonic anhydrase inhibitors. Synthesis of heterocyclic 4-substituted pyridine-3-sulfonamide derivatives and their inhibition of the human cytosolic isozymes I and II and transmembrane tumor-associated isozymes IX and XII. <i>European Journal of Medicinal Chemistry</i> , 2013 , 69, 701-10	6.8	31
754	Inhibition of the β -carbonic anhydrase from the dandruff-producing fungus <i>Malassezia globosa</i> with monothiocarbamates. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 1064-1070	5.6	31
753	A class of carbonic anhydrase I - selective activators. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 37-46	5.6	31

752	Carbonic anhydrase inhibitors: synthesis and inhibition of the human carbonic anhydrase isoforms I, II, IX and XII with benzene sulfonamides incorporating 4- and 3-nitrophthalimide moieties. <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 1586-95	3.4	3 ¹
751	Inhibition of mammalian carbonic anhydrases I-XIV with grayanotoxin III: solution and in silico studies. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2014 , 29, 469-75	5.6	3 ¹
750	Carbonic anhydrase inhibitors: X-ray crystallographic studies for the binding of 5-amino-1,3,4-thiadiazole-2-sulfonamide and 5-(4-amino-3-chloro-5-fluorophenylsulfonamido)-1,3,4-thiadiazole-2-sulfonamide to human isoform II. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2006 , 16, 6204-8	2.9	3 ¹
749	Oxovanadium(IV) complexes of hydrazides: potential antifungal agents. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2006 , 21, 37-42	5.6	3 ¹
748	Benzolamide is not a membrane-impermeant carbonic anhydrase inhibitor. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2004 , 19, 269-73	5.6	3 ¹
747	Gene amplification and cold adaptation of pepsin in Antarctic fish. A possible strategy for food digestion at low temperature. <i>Gene</i> , 2004 , 336, 195-205	3.8	3 ¹
746	Susceptibility to heavy metals and cadmium accumulation in aerobic and anaerobic thermophilic microorganisms isolated from deep-sea hydrothermal vents. <i>Current Microbiology</i> , 2000 , 41, 201-5	2.4	3 ¹
745	Novel carbonic anhydrase isozymes I, II and IV activators incorporating sulfonyl-histamino moieties. <i>Bioorganic and Medicinal Chemistry Letters</i> , 1999 , 9, 2043-8	2.9	3 ¹
744	Cathepsin D from the liver of the antarctic icefish <i>Chionodraco hamatus</i> exhibits unusual activity and stability at high temperatures ¹ . <i>BBA - Proteins and Proteomics</i> , 1999 , 1431, 64-73		3 ¹
743	New advances in HIV entry inhibitors development. <i>Current Drug Targets Infectious Disorders</i> , 2004 , 4, 339-55		3 ¹
742	Phosphorus versus Sulfur: Discovery of Benzenephosphonamidates as Versatile Sulfonamide-Mimic Chemotypes Acting as Carbonic Anhydrase Inhibitors. <i>Chemistry - A European Journal</i> , 2019 , 25, 1188-1192	4.8	3 ¹
741	Discovery of novel 1,3-diaryltriazene sulfonamides as carbonic anhydrase I, II, VII, and IX inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 1575-1580	5.6	3 ¹
740	Design, synthesis and X-ray crystallography of selenides bearing benzenesulfonamide moiety with neuropathic pain modulating effects. <i>European Journal of Medicinal Chemistry</i> , 2018 , 154, 210-219	6.8	3 ¹
739	Synthesis of bulky-tailed sulfonamides incorporating pyrido[2,3-d][1,2,4]triazolo[4,3-a]pyrimidin-1(5H)-yl moieties and evaluation of their carbonic anhydrases I, II, IV and IX inhibitory effects. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 2210-2217	3.4	3 ⁰
738	Probing Molecular Interactions between Human Carbonic Anhydrases (hCAs) and a Novel Class of Benzenesulfonamides. <i>Journal of Medicinal Chemistry</i> , 2017 , 60, 4316-4326	8.3	3 ⁰
737	Fluorinated pyrrolidines and piperidines incorporating tertiary benzenesulfonamide moieties are selective carbonic anhydrase II inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 737-45	5.6	3 ⁰
736	New amide derivatives of Probenecid as selective inhibitors of carbonic anhydrase IX and XII: biological evaluation and molecular modelling studies. <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 2975-81	3.4	3 ⁰
735	Synthesis of Schiff base derivatives of 4-(2-aminoethyl)-benzenesulfonamide with inhibitory activity against carbonic anhydrase isoforms I, II, IX and XII. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015 , 25, 2377-81	2.9	3 ⁰

734	6-Substituted 1,2-benzoxathiine-2,2-dioxides are isoform-selective inhibitors of human carbonic anhydrases IX, XII and VA. <i>Organic and Biomolecular Chemistry</i> , 2015 , 13, 77-80	3.9	30
733	New series of sulfonamides containing amino acid moiety act as effective and selective inhibitors of tumor-associated carbonic anhydrase XII. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 430-4	5.6	30
732	Antileishmanial activity of sulphonamide nanoemulsions targeting the β -carbonic anhydrase from Leishmania species. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 850-857	5.6	30
731	Synthesis of novel 4-functionalized 1,5-diaryl-1,2,3-triazoles containing benzenesulfonamide moiety as carbonic anhydrase I, II, IV and IX inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2018 , 150, 678-686	6.8	30
730	Anion inhibition profiles of the complete domain of the β -carbonic anhydrase from Plasmodium falciparum. <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 4410-4414	3.4	30
729	Synthesis and biological evaluation of benzenesulphonamide-bearing 1,4,5-trisubstituted-1,2,3-triazoles possessing human carbonic anhydrase I, II, IV, and IX inhibitory activity. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 1187-1194	5.6	30
728	Structural basis for the interaction between carbonic anhydrase and 1,2,3,4-tetrahydroisoquinolin-2-ylsulfonamides. <i>Journal of Medicinal Chemistry</i> , 2011 , 54, 2522-6	8.3	30
727	Carbonic anhydrase inhibitors: the X-ray crystal structure of ethoxzolamide complexed to human isoform II reveals the importance of thr200 and gln92 for obtaining tight-binding inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008 , 18, 2669-74	2.9	30
726	Plasmatic exosomes from prostate cancer patients show increased carbonic anhydrase IX expression and activity and low pH. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 280-288	5.6	30
725	Coumarin carbonic anhydrase inhibitors from natural sources. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 1462-1470	5.6	30
724	Inhibition of β and γ -class carbonic anhydrases from bacteria, fungi, algae, diatoms and protozoans with famotidine. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 644-650	5.6	30
723	Synthesis and anti-inflammatory activity of sulfonamides and carboxylates incorporating trimellitimides: Dual cyclooxygenase/carbonic anhydrase inhibitory actions. <i>Bioorganic Chemistry</i> , 2019 , 84, 260-268	5.1	30
722	Synthesis of different thio-scaffolds bearing sulfonamide with subnanomolar carbonic anhydrase II and IX inhibitory properties and X-ray investigations for their inhibitory mechanism. <i>Bioorganic Chemistry</i> , 2018 , 81, 642-648	5.1	30
721	A Straightforward Access to Stable β -Functionalized Alkyl Selenols. <i>Advanced Synthesis and Catalysis</i> , 2018 , 360, 3367-3375	5.6	30
720	N-Substituted and ring opened saccharin derivatives selectively inhibit transmembrane, tumor-associated carbonic anhydrases IX and XII. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 3583-3589	3.4	29
719	Coumarins and other fused bicyclic heterocycles with selective tumor-associated carbonic anhydrase isoforms inhibitory activity. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 677-683	3.4	29
718	ECA-specific inhibitor dithiocarbamate Fc14-584B: a novel antimycobacterial agent with potential to treat drug-resistant tuberculosis. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 832-840	5.6	29
717	Ring opening reactions of heterocycles with selenium and tellurium nucleophiles. <i>New Journal of Chemistry</i> , 2019 , 43, 11451-11468	3.6	29

7 ¹⁶	Sulfur, selenium and tellurium containing amines act as effective carbonic anhydrase activators. <i>Bioorganic Chemistry</i> , 2019 , 87, 516-522	5.1	29
7 ¹⁵	Synthesis and biological evaluation of novel N,N'-diaryl cyanoguanidines acting as potent and selective carbonic anhydrase II inhibitors. <i>Bioorganic Chemistry</i> , 2018 , 77, 245-251	5.1	29
7 ¹⁴	Synthesis of novel acridine and bis acridine sulfonamides with effective inhibitory activity against the cytosolic carbonic anhydrase isoforms II and VII. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 5799-805	3.4	29
7 ¹³	Nitric oxide donors and selective carbonic anhydrase inhibitors: a dual pharmacological approach for the treatment of glaucoma, cancer and osteoporosis. <i>Molecules</i> , 2015 , 20, 5667-79	4.8	29
7 ¹²	Inhibition of Eclass cytosolic human carbonic anhydrases I, II, IX and XII, and Eclass fungal enzymes by carboxylic acids and their derivatives: new isoform-I selective nanomolar inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012 , 22, 5801-6	2.9	29
7 ¹¹	Human carbonic anhydrase VII protects cells from oxidative damage. <i>Biological Chemistry</i> , 2013 , 394, 1343-8	4.5	29
7 ¹⁰	Dietary sodium intake in a sample of adult male population in southern Italy: results of the Olivetti Heart Study. <i>European Journal of Clinical Nutrition</i> , 2010 , 64, 518-24	5.2	29
7 ⁰⁹	Synthesis and evaluation of pharmacological profile of 1-aryl-6,7-dimethoxy-3,4-dihydroisoquinoline-2(1H)-sulfonamides. <i>Bioorganic and Medicinal Chemistry</i> , 2009 , 17, 3659-64	3.4	29
7 ⁰⁸	Carbonic anhydrase inhibitors. Inhibition studies of a coral secretory isoform by sulfonamides. <i>Bioorganic and Medicinal Chemistry</i> , 2009 , 17, 5054-8	3.4	29
7 ⁰⁷	Carbonic anhydrase activators: Activation of the human cytosolic isozyme III and membrane-associated isoform IV with amino acids and amines. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008 , 18, 4303-7	2.9	29
7 ⁰⁶	Protein tyrosine kinase inhibitors as anticancer agents. <i>Expert Opinion on Therapeutic Patents</i> , 2004 , 14, 35-53	6.8	29
7 ⁰⁵	Why hasn't there been more progress in new Chagas disease drug discovery?. <i>Expert Opinion on Drug Discovery</i> , 2020 , 15, 145-158	6.2	29
7 ⁰⁴	N-Nitrosulfonamides: A new chemotype for carbonic anhydrase inhibition. <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 3612-7	3.4	29
7 ⁰³	An Unusual Natural Product Primary Sulfonamide: Synthesis, Carbonic Anhydrase Inhibition, and Protein X-ray Structures of Psammaphin C. <i>Journal of Medicinal Chemistry</i> , 2016 , 59, 5462-70	8.3	29
7 ⁰²	First evaluation of organotellurium derivatives as carbonic anhydrase I, II, IV, VII and IX inhibitors. <i>Bioorganic Chemistry</i> , 2018 , 76, 268-272	5.1	29
7 ⁰¹	Blocking HIF signaling via novel inhibitors of CA9 and APE1/Ref-1 dramatically affects pancreatic cancer cell survival. <i>Scientific Reports</i> , 2018 , 8, 13759	4.9	29
7 ⁰⁰	Genome-wide synthetic lethal screen unveils novel CAIX-NFS1/xCT axis as a targetable vulnerability in hypoxic solid tumors. <i>Science Advances</i> , 2021 , 7,	14.3	29
6 ⁹⁹	Novel synthesized SLC-0111 thiazole and thiadiazole analogues: Determination of their carbonic anhydrase inhibitory activity and molecular modeling studies. <i>Bioorganic Chemistry</i> , 2019 , 87, 794-802	5.1	28

698	Sulfonamide inhibition studies of the β -carbonic anhydrase from the Antarctic bacterium <i>Pseudoalteromonas haloplanktis</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015 , 25, 3550-5	2.9	28
697	Poly(amidoamine) Dendrimers with Carbonic Anhydrase Inhibitory Activity and Antiglaucoma Action. <i>Journal of Medicinal Chemistry</i> , 2015 , 58, 4039-45	8.3	28
696	Experimental evaluation of DC charging architecture for fully-electrified low-power two-wheeler. <i>Applied Energy</i> , 2016 , 162, 1428-1438	10.7	28
695	Synthesis and inhibitory properties of some carbamates on carbonic anhydrase and acetylcholine esterase. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1484-91	5.6	28
694	Attachment of carbohydrates to methoxyaryl moieties leads to highly selective inhibitors of the cancer associated carbonic anhydrase isoforms IX and XII. <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 5308-14	3.4	28
693	Novel small molecule protein arginine deiminase 4 (PAD4) inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013 , 23, 715-9	2.9	28
692	β -Carbonic Anhydrases Possess Thioesterase Activity. <i>ACS Medicinal Chemistry Letters</i> , 2015 , 6, 292-5	4.3	28
691	Carbonic anhydrase inhibitors. Inhibition of the β -class enzymes from the fungal pathogens <i>Candida albicans</i> and <i>Cryptococcus neoformans</i> with branched aliphatic/aromatic carboxylates and their derivatives. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011 , 21, 2521-6	2.9	28
690	Carbonic anhydrase activators: synthesis of high affinity isozymes I, II and IV activators, derivatives of 4-(4-tosylureido-amino acyl)ethyl-1H-imidazole (histamine derivatives). <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2000 , 15, 139-61		28
689	Carbonic anhydrase inhibitors: inhibition of isozymes I, II and IV by sulfamide and sulfamic acid derivatives. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2000 , 15, 443-53		28
688	9,10-Dibromo-N-aryl-9,10-dihydro-9,10-[3,4]epipyrroloanthracene-12,14-diones: Synthesis and Investigation of Their Effects on Carbonic Anhydrase Isozymes I, II, IX, and XII. <i>Archiv Der Pharmazie</i> , 2016 , 349, 466-74	4.3	28
687	Activation of β - and γ -carbonic anhydrases from pathogenic bacteria with tripeptides. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 945-950	5.6	28
686	Synthesis and biological evaluation of cyclic imides incorporating benzenesulfonamide moieties as carbonic anhydrase I, II, IV and IX inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 1666-1671	3.4	27
685	Sulfonamide inhibition study of the β -class carbonic anhydrase from the caries producing pathogen <i>Streptococcus mutans</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015 , 25, 2291-7	2.9	27
684	2-Benzylpiperazine: A new scaffold for potent human carbonic anhydrase inhibitors. Synthesis, enzyme inhibition, enantioselectivity, computational and crystallographic studies and <i>in vivo</i> activity for a new class of intraocular pressure lowering agents. <i>European Journal of Medicinal Chemistry</i> , 2018 , 151, 363-375	6.8	27
683	Inhibition studies on a panel of human carbonic anhydrases with N1-substituted secondary sulfonamides incorporating thiazolinone or imidazolone-indole tails. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 629-638	5.6	27
682	Inhibition of carbonic anhydrase from <i>Trypanosoma cruzi</i> for the management of Chagas disease: an underexplored therapeutic opportunity. <i>Future Medicinal Chemistry</i> , 2016 , 8, 311-24	4.1	27
681	Targeting Tumor Associated Carbonic Anhydrases IX and XII: Highly Isozyme Selective Coumarin and Psoralen Inhibitors. <i>ACS Medicinal Chemistry Letters</i> , 2018 , 9, 725-729	4.3	27

- 680 Anion inhibition study of the Eclass carbonic anhydrase (PgiCAB) from the oral pathogen *Porphyromonas gingivalis*. *Bioorganic and Medicinal Chemistry Letters*, **2014**, 24, 4402-4406 2.9 27
- 679 Inhibition of beta-carbonic anhydrases from the bacterial pathogen *Brucella suis* with inorganic anions. *Journal of Inorganic Biochemistry*, **2012**, 110, 36-9 4.2 27
- 678 Effects of dopaminergic compounds on carbonic anhydrase isozymes I, II, and VI. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2012**, 27, 365-9 5.6 27
- 677 Inhibition of carbonic anhydrase isozymes I and II with natural products extracted from plants, mushrooms and honey. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2012**, 27, 395-402 5.6 27
- 676 Novel organometallic cationic ruthenium(II) pentamethylcyclopentadienyl benzenesulfonamide complexes targeted to inhibit carbonic anhydrase. *Journal of Biological Inorganic Chemistry*, **2009**, 14, 935-45 3.7 27
- 675 Carbonic anhydrase inhibitors: inhibition studies of a coral secretory isoform with inorganic anions. *Bioorganic and Medicinal Chemistry Letters*, **2009**, 19, 650-3 2.9 27
- 674 Carbonic anhydrase inhibitors. Inhibition of the human cytosolic isoforms I and II and transmembrane, tumor-associated isoforms IX and XII with boronic acids. *Bioorganic and Medicinal Chemistry*, **2009**, 17, 3649-52 3.4 27
- 673 Carbonic anhydrase inhibitors. Inhibition of the Rv1284 and Rv3273 beta-carbonic anhydrases from *Mycobacterium tuberculosis* with diazenylbenzenesulfonamides. *Bioorganic and Medicinal Chemistry Letters*, **2009**, 19, 4929-32 2.9 27
- 672 Recent advances in structural studies of the carbonic anhydrase family: the crystal structure of human CA IX and CA XIII. *Current Pharmaceutical Design*, **2010**, 16, 3246-54 3.3 27
- 671 Carbonic anhydrase inhibitors: inhibition of human cytosolic isozymes I and II and tumor-associated isozymes IX and XII with S-substituted 4-chloro-2-mercapto-5-methyl-benzenesulfonamides. *Bioorganic and Medicinal Chemistry*, **2008**, 16, 3933-40 3.4 27
- 670 Stability and conformational dynamics of metallothioneins from the antarctic fish *Notothenia coriiceps* and mouse. *Proteins: Structure, Function and Bioinformatics*, **2002**, 46, 259-67 4.2 27
- 669 Carbonic anhydrase activators. VII. Isozyme II activation by bisazoly-methanes, -ethanes and related azoles. *Biological and Pharmaceutical Bulletin*, **1993**, 16, 1236-9 2.3 27
- 668 Bioactive isoflavones from *Pueraria lobata* root and starch: Different extraction techniques and carbonic anhydrase inhibition. *Food and Chemical Toxicology*, **2018**, 112, 441-447 4.7 27
- 667 Famotidine, an Antiulcer Agent, Strongly Inhibits and Human Carbonic Anhydrases. *ACS Medicinal Chemistry Letters*, **2018**, 9, 1035-1038 4.3 27
- 666 Designing of novel carbonic anhydrase inhibitors and activators. *Current Medicinal Chemistry Cardiovascular and Hematological Agents*, **2004**, 2, 49-68 27
- 665 Carbonic anhydrase inhibitory properties of some uracil derivatives. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2017**, 32, 74-77 5.6 26
- 664 Insights into the role of reactive sulfhydryl groups of Carbonic Anhydrase III and VII during oxidative damage. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2017**, 32, 5-12 5.6 26
- 663 Seleno-Michael Reaction of Stable Functionalised Alkyl Selenols: A Versatile Tool for the Synthesis of Acyclic and Cyclic Unsymmetrical Alkyl and Vinyl Selenides. *Advanced Synthesis and Catalysis*, **2019**, 361, 2337-2346 5.6 26

662	Synthesis and biological evaluation of coumarin-1,3,4-oxadiazole hybrids as selective carbonic anhydrase IX and XII inhibitors. <i>Bioorganic Chemistry</i> , 2019 , 87, 765-772	5.1	26
661	Poly(amidoamine) dendrimers show carbonic anhydrase inhibitory activity against β and γ class enzymes. <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 6794-8	3.4	26
660	Active Components of Essential Oils as Anti-Obesity Potential Drugs Investigated by in Silico Techniques. <i>Journal of Agricultural and Food Chemistry</i> , 2016 , 64, 5295-300	5.7	26
659	Carbonic anhydrase activators: Activation of the β -carbonic anhydrase from <i>Malassezia globosa</i> with amines and amino acids. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016 , 26, 1381-5	2.9	26
658	Synthesis of 4-sulfamoylphenyl-benzylamine derivatives with inhibitory activity against human carbonic anhydrase isoforms I, II, IX and XII. <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 982-8	3.4	26
657	Design and synthesis of novel benzenesulfonamide containing 1,2,3-triazoles as potent human carbonic anhydrase isoforms I, II, IV and IX inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2018 , 155, 545-551	6.8	26
656	Synthesis and Evaluation of Carbonic Anhydrase Inhibitors with Carbon Monoxide Releasing Properties for the Management of Rheumatoid Arthritis. <i>Journal of Medicinal Chemistry</i> , 2019 , 62, 7233-7249	8.3	26
655	5-Substituted-(1,2,3-triazol-4-yl)thiophene-2-sulfonamides strongly inhibit human carbonic anhydrases I, II, IX and XII: solution and X-ray crystallographic studies. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 5130-8	3.4	26
654	Sulfocoumarin-, Coumarin-, 4-Sulfamoylphenyl-Bearing Indazole-3-carboxamide Hybrids: Synthesis and Selective Inhibition of Tumor-Associated Carbonic Anhydrase Isozymes IX and XII. <i>ChemMedChem</i> , 2017 , 12, 1578-1584	3.7	26
653	Inhibition of β -carbonic anhydrases with ureido-substituted benzenesulfonamides. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011 , 21, 102-5	2.9	26
652	Carbonic anhydrase inhibitors. The beta-carbonic anhydrases from the fungal pathogens <i>Cryptococcus neoformans</i> and <i>Candida albicans</i> are strongly inhibited by substituted-phenyl-1H-indole-5-sulfonamides. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010 , 20, 2508-11	2.9	26
651	Carbonic anhydrase inhibitors: inhibition of the cytosolic human isozyme VII with anions. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2006 , 16, 3139-43	2.9	26
650	Carbonic anhydrase inhibitors: inhibition of the membrane-bound human isozyme IV with anions. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2004 , 14, 5769-73	2.9	26
649	Carbonic anhydrase inhibitors: inhibition of isozymes I, II and IV with N-hydroxysulfonamides--a novel class of intraocular pressure lowering agents. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 1998 , 13, 267-84		26
648	Selective inhibition of carbonic anhydrase IX over carbonic anhydrase XII in breast cancer cells using benzene sulfonamides: Disconnect between activity and growth inhibition. <i>PLoS ONE</i> , 2018 , 13, e0207417	3.7	26
647	Heterocoumarins Are Selective Carbonic Anhydrase IX and XII Inhibitors with Cytotoxic Effects against Cancer Cells Lines. <i>ACS Medicinal Chemistry Letters</i> , 2018 , 9, 947-951	4.3	26
646	Inhibition of the β -carbonic anhydrase from <i>Vibrio cholerae</i> with amides and sulfonamides incorporating imidazole moieties. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 798-804	5.6	25
645	Synthesis of benzenesulfonamides linked to quinazoline scaffolds as novel carbonic anhydrase inhibitors. <i>Bioorganic Chemistry</i> , 2019 , 87, 78-90	5.1	25

- 644 Cloning, characterization and anion inhibition studies of a new β -carbonic anhydrase from the Antarctic bacterium *Pseudoalteromonas haloplanktis*. *Bioorganic and Medicinal Chemistry*, **2015**, 23, 4403-4409^{3.4} 25
- 643 Anion inhibition studies of the dandruff-producing fungus *Malassezia globosa* β -carbonic anhydrase MgCA. *Bioorganic and Medicinal Chemistry Letters*, **2015**, 25, 5194-8 2.9 25
- 642 Synthesis of novel isoindoline-1,3-dione-based oximes and benzenesulfonamide hydrazones as selective inhibitors of the tumor-associated carbonic anhydrase IX. *Bioorganic Chemistry*, **2018**, 80, 706-713^{5.1} 25
- 641 Furazan and furoxan sulfonamides are strong β -carbonic anhydrase inhibitors and potential antiglaucoma agents. *Bioorganic and Medicinal Chemistry*, **2014**, 22, 3913-21 3.4 25
- 640 Protein-protein interactions: inhibition of mammalian carbonic anhydrases I-XV by the murine inhibitor of carbonic anhydrase and other members of the transferrin family. *Journal of Medicinal Chemistry*, **2012**, 55, 5529-35 8.3 25
- 639 Pyridinium derivatives of histamine are potent activators of cytosolic carbonic anhydrase isoforms I, II and VII. *Organic and Biomolecular Chemistry*, **2011**, 9, 2790-800 3.9 25
- 638 An inhibitor-like binding mode of a carbonic anhydrase activator within the active site of isoform II. *Bioorganic and Medicinal Chemistry Letters*, **2011**, 21, 2764-8 2.9 25
- 637 Carbonic anhydrase inhibitors. Inhibition studies with anions and sulfonamides of a new cytosolic enzyme from the scleractinian coral *Stylophora pistillata*. *Bioorganic and Medicinal Chemistry Letters*, **2011**, 21, 710-4 2.9 25
- 636 Carbonic anhydrase activators. The first activation study of a coral secretory isoform with amino acids and amines. *Bioorganic and Medicinal Chemistry*, **2010**, 18, 2300-2303 3.4 25
- 635 External pH influences the transcriptional profile of the carbonic anhydrase, CAH-4b in *Caenorhabditis elegans*. *Molecular and Biochemical Parasitology*, **2008**, 161, 140-9 1.9 25
- 634 Therapeutic applications of the carbonic anhydrase inhibitors. *Therapy: Open Access in Clinical Medicine*, **2007**, 4, 355-378 25
- 633 Carbonic anhydrase inhibitors: design of thioureido sulfonamides with potent isozyme II and XII inhibitory properties and intraocular pressure lowering activity in a rabbit model of glaucoma. *Bioorganic and Medicinal Chemistry Letters*, **2005**, 15, 3821-7 2.9 25
- 632 Carbonic anhydrase activators: amino acyl/dipeptidyl histamine derivatives bind with high affinity to isozymes I, II and IV and act as efficient activators. *Bioorganic and Medicinal Chemistry*, **1999**, 7, 2915-23^{3.4} 25
- 631 Insights into the binding mode of sulphamates and sulphamides to hCA II: crystallographic studies and binding free energy calculations. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2017**, 32, 1002-1011^{5.6} 25
- 630 Pyrazolylbenzo[d]imidazoles as new potent and selective inhibitors of carbonic anhydrase isoforms hCA IX and XII. *Bioorganic and Medicinal Chemistry*, **2016**, 24, 2907-2913 3.4 25
- 629 Drug Screening in Human Cells by NMR Spectroscopy Allows the Early Assessment of Drug Potency. *Angewandte Chemie - International Edition*, **2020**, 59, 6535-6539 16.4 25
- 628 Biochemical characterization of the native β -carbonic anhydrase purified from the mantle of the Mediterranean mussel, *Mytilus galloprovincialis*. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2017**, 32, 632-639 5.6 24
- 627 Benzenesulfonamide bearing imidazothiadiazole and thiazolotriazole scaffolds as potent tumor associated human carbonic anhydrase IX and XII inhibitors. *Bioorganic and Medicinal Chemistry*, **2017**, 25, 1286-1293 3.4 24

626	Discovery of curcumin inspired sulfonamide derivatives as a new class of carbonic anhydrase isoforms I, II, IX, and XII inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 1274-1281	5.6	24
625	Psychoactive substances belonging to the amphetamine class potentially activate brain carbonic anhydrase isoforms VA, VB, VII, and XII. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 1253-1259	5.6	24
624	Inhibition studies of bacterial, fungal and protozoan Eclass carbonic anhydrases with Schiff bases incorporating sulfonamide moieties. <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 4181-4187	3.4	24
623	Spirobisnaphthalenes effectively inhibit carbonic anhydrase. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 503-7	5.6	24
622	Inhibition of mammalian carbonic anhydrase isoforms I-XIV with a series of phenolic acid esters. <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 7181-8	3.4	24
621	1,3-Dipolar Cycloaddition, HPLC Enantioseparation, and Docking Studies of Saccharin/Isoxazole and Saccharin/Isoxazoline Derivatives as Selective Carbonic Anhydrase IX and XII Inhibitors. <i>Journal of Medicinal Chemistry</i> , 2020 , 63, 2470-2488	8.3	24
620	Natural Polyphenols Selectively Inhibit ECarbonic Anhydrase from the Dandruff-Producing Fungus <i>Malassezia globosa</i> : Activity and Modeling Studies. <i>ChemMedChem</i> , 2018 , 13, 816-823	3.7	24
619	Cloning, characterization and anion inhibition study of a Eclass carbonic anhydrase from the caries producing pathogen <i>Streptococcus mutans</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 2995-3001	3.4	24
618	Bidentate Zinc chelators for alpha-carbonic anhydrases that produce a trigonal bipyramidal coordination geometry. <i>ChemMedChem</i> , 2010 , 5, 1609-15	3.7	24
617	3-Methylthiazolo[3,2-a]benzimidazole-benzenesulfonamide conjugates as novel carbonic anhydrase inhibitors endowed with anticancer activity: Design, synthesis, biological and molecular modeling studies. <i>European Journal of Medicinal Chemistry</i> , 2020 , 207, 112745	6.8	24
616	Bortezomib inhibits bacterial and fungal Ecarbonic anhydrases. <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 4406-4409	3.4	24
615	Identification and characterization of the ECA in the outer membrane vesicles produced by <i>Helicobacter pylori</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 189-195	5.6	24
614	Crystal structure of the human carbonic anhydrase II adduct with 1-(4-sulfamoylphenyl-ethyl)-2,4,6-triphenylpyridinium perchlorate, a membrane-impermeant, isoform selective inhibitor. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 151-157	5.6	24
613	Carbonic anhydrases activation with 3-amino-1H-1,2,4-triazole-1-carboxamides: Discovery of subnanomolar isoform II activators. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 1681-1686	3.4	23
612	Synthesis and human/bacterial carbonic anhydrase inhibition with a series of sulfonamides incorporating phthalimido moieties. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 2524-2529	3.4	23
611	Anti- activity of ethoxzolamide. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 1660-1663	3.6	23
610	The management of glaucoma and macular degeneration. <i>Expert Opinion on Therapeutic Patents</i> , 2019 , 29, 745-747	6.8	23
609	Novel approaches for designing drugs that interfere with pH regulation. <i>Expert Opinion on Drug Discovery</i> , 2019 , 14, 231-248	6.2	23

608	Discovery of new organoselenium compounds as antileishmanial agents. <i>Bioorganic Chemistry</i> , 2019 , 86, 339-345	5.1	23
607	Dipotassium-trioxohydroxytetrafluorotriborate, $K_2[B_3O_6(OH)]$, is a potent inhibitor of human carbonic anhydrases. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 341-4	5.6	23
606	Synthesis of sulfonamides incorporating piperazinyl-ureido moieties and their carbonic anhydrase I, II, IX and XII inhibitory activity. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015 , 25, 3850-3	2.9	23
605	C-glycosides incorporating the 6-methoxy-2-naphthyl moiety are selective inhibitors of fungal and bacterial carbonic anhydrases. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 857-61	5.6	23
604	Synthesis of novel acridine bis-sulfonamides with effective inhibitory activity against the carbonic anhydrase isoforms I, II, IX and XII. <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 6573-80	3.4	23
603	Carbonic anhydrase IX inhibition is an effective strategy for osteosarcoma treatment. <i>Expert Opinion on Therapeutic Targets</i> , 2015 , 19, 1593-605	6.4	23
602	Mycobacterial carbonic anhydrase inhibition with phenolic acids and esters: kinetic and computational investigations. <i>Organic and Biomolecular Chemistry</i> , 2016 , 14, 8322-30	3.9	23
601	Dynamic encapsulation and activation of carbonic anhydrase in multivalent dynameric host matrices. <i>Chemical Communications</i> , 2016 , 52, 4053-5	5.8	23
600	Sulfonamides with Potent Inhibitory Action and Selectivity against the β -Carbonic Anhydrase from <i>Vibrio cholerae</i> . <i>ACS Medicinal Chemistry Letters</i> , 2014 , 5, 826-30	4.3	23
599	Metalloenzyme inhibitors for the treatment of Gram-negative bacterial infections: a patent review (2009-2012). <i>Expert Opinion on Therapeutic Patents</i> , 2013 , 23, 777-88	6.8	23
598	Synthesis, biological activity and multiscale molecular modeling studies for coumaryl-carboxamide derivatives as selective carbonic anhydrase IX inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 1042-1052	5.6	23
597	<i>Burkholderia pseudomallei</i> β -carbonic anhydrase is strongly activated by amino acids and amines. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2017 , 27, 77-80	2.9	23
596	Targeting <i>Malassezia</i> species for Novel Synthetic and Natural Antidandruff Agents. <i>Current Medicinal Chemistry</i> , 2017 , 24, 2392-2412	4.3	23
595	Design and synthesis of benzothiazole-6-sulfonamides acting as highly potent inhibitors of carbonic anhydrase isoforms I, II, IX and XII. <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 4989-4999	3.4	23
594	Synthesis of aminocyanopyrazoles via a multi-component reaction and anti-carbonic anhydrase inhibitory activity of their sulfamide derivatives against cytosolic and transmembrane isoforms. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2013 , 28, 343-9	5.6	23
593	Molecular cloning and sequence determination of a novel aspartic proteinase from Antarctic fish. <i>BBA - Proteins and Proteomics</i> , 1998 , 1387, 457-61		23
592	Design, synthesis and molecular modelling studies of some pyrazole derivatives as carbonic anhydrase inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 289-297	5.6	23
591	Structure-Activity Relationship Studies of Acetazolamide-Based Carbonic Anhydrase Inhibitors with Activity against. <i>ACS Infectious Diseases</i> , 2021 , 7, 1969-1984	5.5	23

590	In Vivo Evaluation of Selective Carbonic Anhydrase Inhibitors as Potential Anticonvulsant Agents. <i>ChemMedChem</i> , 2016 , 11, 1812-8	3.7	23
589	Mapping Selective Inhibition of the Cancer-Related Carbonic Anhydrase IX Using Structure-Activity Relationships of Glucosyl-Based Sulfamates. <i>Journal of Medicinal Chemistry</i> , 2015 , 58, 6630-8	8.3	22
588	An update on drug interaction considerations in the therapeutic use of carbonic anhydrase inhibitors. <i>Expert Opinion on Drug Metabolism and Toxicology</i> , 2020 , 16, 297-307	5.5	22
587	A Remarkable Influence of a Trifluoromethyl Group on the Reactions of β -Mercaptoalcohols with Fluorinated β -Bromo-enones. <i>European Journal of Organic Chemistry</i> , 2018 , 2018, 3716-3723	3.2	22
586	A new procedure for the cloning, expression and purification of the β -carbonic anhydrase from the pathogenic yeast <i>Malassezia globosa</i> , an anti-dandruff drug target. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1156-61	5.6	22
585	Synthesis and carbonic anhydrase inhibitory properties of amino acid - coumarin/quinolinone conjugates incorporating glycine, alanine and phenylalanine moieties. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1198-202	5.6	22
584	Anion inhibition study of the β -carbonic anhydrase (CahB1) from the cyanobacterium <i>Coleofasciculus chthonoplastes</i> (ex- <i>Microcoleus chthonoplastes</i>). <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 1667-71	3.4	22
583	Carbonic anhydrase inhibitors. Inhibition of human cytosolic isoforms I and II with (reduced) Schiff's bases incorporating sulfonamide, carboxylate and carboxymethyl moieties. <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 2867-74	3.4	22
582	-Acylbenzenesulfonamide Dihydro-1,3,4-oxadiazole Hybrids: Seeking Selectivity toward Carbonic Anhydrase Isoforms. <i>ACS Medicinal Chemistry Letters</i> , 2017 , 8, 792-796	4.3	22
581	3-Hydroxy-1H-quinazoline-2,4-dione as a New Scaffold To Develop Potent and Selective Inhibitors of the Tumor-Associated Carbonic Anhydrases IX and XII. <i>Journal of Medicinal Chemistry</i> , 2017 , 60, 6428-6439	8.3	22
580	Synthesis, structure-activity relationship studies, and X-ray crystallographic analysis of arylsulfonamides as potent carbonic anhydrase inhibitors. <i>Journal of Medicinal Chemistry</i> , 2012 , 55, 3891-9	8.3	22
579	Serendipitous fragment-based drug discovery: ketogenic diet metabolites and statins effectively inhibit several carbonic anhydrases. <i>Chemical Communications</i> , 2012 , 48, 3551-3	5.8	22
578	Gene expression profiling of phytoplasma-infected Madagascar periwinkle leaves using differential display. <i>Molecular Biology Reports</i> , 2011 , 38, 2993-3000	2.8	22
577	Structural characterization and thermal stability of <i>Notothenia coriiceps</i> metallothionein. <i>Biochemical Journal</i> , 2001 , 354, 291-299	3.8	22
576	Antifungal Activity of Ag(I) and Zn(II) Complexes of Sulfacetamide Derivatives. <i>Metal-Based Drugs</i> , 2000 , 7, 49-54		22
575	Carbonic anhydrase inhibition with a series of novel benzenesulfonamide-triazole conjugates. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 1565-1574	5.6	22
574	Discovery of new 2, 5-disubstituted 1,3-selenazoles as selective human carbonic anhydrase IX inhibitors with potent anti-tumor activity. <i>European Journal of Medicinal Chemistry</i> , 2018 , 157, 1214-1222	6.8	22
573	Evaluation of sulphonamide derivatives acting as inhibitors of human carbonic anhydrase isoforms I, II and <i>Mycobacterium tuberculosis</i> β -class enzyme Rv3273. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 962-971	5.6	22

572	Hydroxamic acid derivatives: a promising scaffold for rational compound optimization in Chagas disease. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 964-73	5.6	21
571	Sulfonamide inhibition profile of the α -carbonic anhydrase identified in the genome of the pathogenic bacterium <i>Burkholderia pseudomallei</i> the etiological agent responsible of melioidosis. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2017 , 27, 490-495	2.9	21
570	Continued exploration and tail approach synthesis of benzenesulfonamides containing triazole and dual triazole moieties as carbonic anhydrase I, II, IV and IX inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2019 , 183, 111698	6.8	21
569	7-Amino-3,4-dihydro-1H-quinolin-2-one, a compound similar to the substituted coumarins, inhibits α -carbonic anhydrases without hydrolysis of the lactam ring. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 773-7	5.6	21
568	Synthesis, biological evaluation and computational studies of novel iminothiazolidinone benzenesulfonamides as potent carbonic anhydrase II and IX inhibitors. <i>Bioorganic Chemistry</i> , 2018 , 77, 381-386	5.1	21
567	Design, synthesis and biological evaluation of N-(5-methyl-isoxazol-3-yl)/1,3,4-thiadiazol-2-yl)-4-(3-substitutedphenylureido) benzenesulfonamides as human carbonic anhydrase isoenzymes I, II, VII and XII inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 151-158	5.6	21
566	Synthesis and carbonic anhydrase I, II, IX and XII inhibition studies of 4-N,N-disubstituted sulfanilamides incorporating 4,4,4-trifluoro-3-oxo-but-1-enyl, phenacylthiourea and imidazol-2(3H)-one/thione moieties. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014 , 24, 1776-9	2.9	21
565	Synthesis and carbonic anhydrase inhibition of polycyclic imides incorporating N-benzenesulfonamide moieties. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 5373-5379	3.4	21
564	Comparison of the Sulfonamide Inhibition Profiles of the β and α -Carbonic Anhydrases from the Pathogenic Bacterium <i>Burkholderia pseudomallei</i> . <i>Molecules</i> , 2017 , 22,	4.8	21
563	Inhibition studies of new ureido-substituted sulfonamides incorporating a GABA moiety against human carbonic anhydrase isoforms I-XIV. <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 6768-75	3.4	21
562	The molecular characterization of a novel GH38 β -mannosidase from the crenarchaeon <i>Sulfolobus solfataricus</i> revealed its ability in de-mannosylating glycoproteins. <i>Biochimie</i> , 2010 , 92, 1895-907	4.6	21
561	Carbonic anhydrase activators: activation of human isozymes I, II and IX with phenylsulfonylhydrazido l-histidine derivatives. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009 , 19, 2440-3	2.9	21
560	Identification of potent and selective human carbonic anhydrase VII (hCA VII) inhibitors. <i>ChemMedChem</i> , 2010 , 5, 823-6	3.7	21
559	Phylogenetic divergence of fish and mammalian metallothionein: relationships with structural diversification and organismal temperature. <i>Journal of Molecular Evolution</i> , 2003 , 57 Suppl 1, S250-7	3.1	21
558	Carbonic anhydrase inhibitors: an update on experimental agents for the treatment and imaging of hypoxic tumors. <i>Expert Opinion on Investigational Drugs</i> , 2021 ,	5.9	21
557	Synthesis, biological and molecular dynamics investigations with a series of triazolopyrimidine/triazole-based benzenesulfonamides as novel carbonic anhydrase inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2020 , 185, 111843	6.8	21
556	The anticonvulsant sulfamide JNJ-26990990 and its S,S-dioxide analog strongly inhibit carbonic anhydrases: solution and X-ray crystallographic studies. <i>Organic and Biomolecular Chemistry</i> , 2016 , 14, 4853-8	3.9	21
555	Synthesis of isoxazole-containing sulfonamides with potent carbonic anhydrase II and VII inhibitory properties. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 1456-1464	3.4	20

554	Design, synthesis and biological evaluation of coumarin-3-carboxamides as selective carbonic anhydrase IX and XII inhibitors. <i>Bioorganic Chemistry</i> , 2019 , 86, 386-392	5.1	20
553	Synthesis of a novel affinity gel for the purification of carbonic anhydrases. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 240-4	5.6	20
552	The β -carbonic anhydrase from the malaria mosquito <i>Anopheles gambiae</i> is highly inhibited by sulfonamides. <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 2303-9	3.4	20
551	<i>Ascaris lumbricoides</i> β -carbonic anhydrase: a potential target enzyme for treatment of ascariasis. <i>Parasites and Vectors</i> , 2015 , 8, 479	4	20
550	Discovery of thiazolin-4-one-based aromatic sulfamates as a new class of carbonic anhydrase isoforms I, II, IV, and IX inhibitors. <i>Bioorganic Chemistry</i> , 2018 , 77, 293-299	5.1	20
549	Novel 6- and 7-Substituted Coumarins with Inhibitory Action against Lipoxygenase and Tumor-Associated Carbonic Anhydrase IX. <i>Molecules</i> , 2018 , 23,	4.8	20
548	Synthesis and biological evaluation of novel 3-(quinolin-4-ylamino)benzenesulfonamides AQ3 as carbonic anhydrase isoforms I and II inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 1457-1464	5.6	20
547	Dual carbonic anhydrase/matrix metalloproteinase inhibitors incorporating bisphosphonic acid moieties targeting bone tumors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014 , 24, 2617-20	2.9	20
546	Synthesis of sulfonamides with effective inhibitory action against <i>Porphyromonas gingivalis</i> β -carbonic anhydrase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014 , 24, 4006-10	2.9	20
545	Dialkyl Dicyanofumarates as Oxidizing Reagents for the Conversion of Thiols into Disulfides and Selenols into Diselenides. <i>European Journal of Organic Chemistry</i> , 2017 , 2017, 6831-6839	3.2	20
544	QSARs on human carbonic anhydrase VA and VB inhibitors of some new not yet synthesized, substituted aromatic/heterocyclic sulphonamides as anti-obesity agent. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2012 , 27, 666-72	5.6	20
543	Carbonic anhydrase I and II activation with mono- and dihalogenated histamine derivatives. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011 , 21, 4884-7	2.9	20
542	Carbonic anhydrase inhibitors. Interaction of 2-N,N-dimethylamino-1,3,4-thiadiazole-5-methanesulfonamide with 12 mammalian isoforms: kinetic and X-ray crystallographic studies. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008 , 18, 999-1005	2.9	20
541	Development of novel benzofuran-based SLC-0111 analogs as selective cancer-associated carbonic anhydrase isoform IX inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2021 , 216, 113283	6.8	20
540	The first activation studies of the β -carbonic anhydrase from the malaria parasite <i>Plasmodium falciparum</i> with amines and amino acids. <i>Bioorganic Chemistry</i> , 2018 , 80, 94-98	5.1	20
539	Production and covalent immobilisation of the recombinant bacterial carbonic anhydrase (SspCA) onto magnetic nanoparticles. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 759-766	5.6	19
538	Crystal structure and chemical inhibition of essential schistosome host-interactive virulence factor carbonic anhydrase SmCA. <i>Communications Biology</i> , 2019 , 2, 333	6.7	19
537	Crystal Structure of Carbonic Anhydrase II in Complex with an Activating Ligand: Implications in Neuronal Function. <i>Molecular Neurobiology</i> , 2018 , 55, 7431-7437	6.2	19

536	Novel carbonic anhydrase IX-targeted therapy enhances the anti-tumour effects of cisplatin in small cell lung cancer. <i>International Journal of Cancer</i> , 2018 , 142, 191-201	7.5	19
535	The Crystal Structure of a hCA VII Variant Provides Insights into the Molecular Determinants Responsible for Its Catalytic Behavior. <i>International Journal of Molecular Sciences</i> , 2018 , 19,	6.3	19
534	Structural Mapping of Anion Inhibitors to β -Carbonic Anhydrase psCA3 from <i>Pseudomonas aeruginosa</i> . <i>ChemMedChem</i> , 2018 , 13, 2024-2029	3.7	19
533	o-Benzenedisulfonimido-sulfonamides are potent inhibitors of the tumor-associated carbonic anhydrase isoforms CA IX and CA XII. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 1386-91	3.4	19
532	Inhibition of tumor-associated human carbonic anhydrase isozymes IX and XII by a new class of substituted-phenylacetamido aromatic sulfonamides. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 5228-32	3.4	19
531	Structural effect of phenyl ring compared to thiadiazole based adamantyl-sulfonamides on carbonic anhydrase inhibition. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 2314-2318	3.4	19
530	A new class of quinazoline-sulfonamides acting as efficient inhibitors against the β -carbonic anhydrase from <i>Trypanosoma cruzi</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 581-5	5.6	19
529	A new recombinant MnSOD prevents the cyclosporine A-induced renal impairment. <i>Nephrology Dialysis Transplantation</i> , 2013 , 28, 2066-72	4.3	19
528	Carbonic anhydrase inhibitors. Comparison of aliphatic sulfamate/bis-sulfamate adducts with isozymes II and IX as a platform for designing tight-binding, more isoform-selective inhibitors. <i>Journal of Medicinal Chemistry</i> , 2009 , 52, 5990-8	8.3	19
527	Direct and straightforward access to substituted alkyl selenols as novel carbonic anhydrase inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2020 , 185, 111811	6.8	19
526	4-Substituted benzenesulfonamides featuring cyclic imides moieties exhibit potent and isoform-selective carbonic anhydrase II/IX inhibition. <i>Bioorganic Chemistry</i> , 2019 , 83, 198-204	5.1	19
525	Novel 3-substituted coumarins as selective human carbonic anhydrase IX and XII inhibitors: Synthesis, biological and molecular dynamics analysis. <i>European Journal of Medicinal Chemistry</i> , 2021 , 209, 112897	6.8	19
524	Novel sulfonamide-containing 2-indolinones that selectively inhibit tumor-associated alpha carbonic anhydrases. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 3714-3718	3.4	18
523	Activation of β and γ class of carbonic anhydrases with amines and amino acids: a review. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 1652-1659	5.6	18
522	Carbonic anhydrase inhibitors: Design, synthesis and structural characterization of new heteroaryl-N-carbonylbenzenesulfonamides targeting druggable human carbonic anhydrase isoforms. <i>European Journal of Medicinal Chemistry</i> , 2015 , 102, 223-32	6.8	18
521	The role of carbonic anhydrases in extinction of contextual fear memory. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 16000-16008	11.5	18
520	Biochemical and structural characterisation of a protozoan beta-carbonic anhydrase from. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 1292-1299	5.6	18
519	Evaluation of Tc-sulfonamide and sulfocoumarin derivatives for imaging carbonic anhydrase IX expression. <i>Journal of Inorganic Biochemistry</i> , 2018 , 185, 63-70	4.2	18

518	Discovery of Benzenesulfonamide Derivatives as Carbonic Anhydrase Inhibitors with Effective Anticonvulsant Action: Design, Synthesis, and Pharmacological Evaluation. <i>Journal of Medicinal Chemistry</i> , 2018 , 61, 3151-3165	8.3	18
517	Anion inhibition studies of the β -carbonic anhydrase from the pathogenic bacterium <i>Vibrio cholerae</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016 , 26, 1406-10	2.9	18
516	Synthesis of N-alkyl (aryl)-tetra pyrimidine thiones and investigation of their human carbonic anhydrase I and II inhibitory effects. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1192-7	5.6	18
515	Isatin analogs as novel inhibitors of <i>Candida</i> spp. β -carbonic anhydrase enzymes. <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 1648-52	3.4	18
514	Sulfamide derivatives with selective carbonic anhydrase VII inhibitory action. <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 894-901	3.4	18
513	Carbonic anhydrase inhibitors: synthesis and inhibition of the human carbonic anhydrase isoforms I, II, VII, IX and XII with benzene sulfonamides incorporating 4,5,6,7-tetrabromophthalimide moiety. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 5973-82	3.4	18
512	Inhibition of human carbonic anhydrase isoforms I-XIV with sulfonamides incorporating fluorine and 1,3,5-triazine moieties. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 6929-36	3.4	18
511	Novel Sulfamide-Containing Compounds as Selective Carbonic Anhydrase I Inhibitors. <i>Molecules</i> , 2017 , 22,	4.8	18
510	Natural product polyamines that inhibit human carbonic anhydrases. <i>BioMed Research International</i> , 2014 , 2014, 374079	3	18
509	4-Functionalized 1,3-diarylpyrazoles bearing 6-aminosulfonylbenzothiazole moiety as potent inhibitors of carbonic anhydrase isoforms hCA I, II, IX and XII. <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 6945-52	3.4	18
508	Carbonic anhydrase inhibitors: purification and inhibition studies of pigeon (<i>Columba livia</i> var. domestica) red blood cell carbonic anhydrase with sulfonamides. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2011 , 26, 749-53	5.6	18
507	A thiabendazole sulfonamide shows potent inhibitory activity against mammalian and nematode α -carbonic anhydrases. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009 , 19, 1371-5	2.9	18
506	Acetaldehyde-derived modifications on cytosolic human carbonic anhydrases. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2011 , 26, 862-70	5.6	18
505	Carbonic anhydrase activators: activation of the β -carbonic anhydrases from the pathogenic fungi <i>Candida albicans</i> and <i>Cryptococcus neoformans</i> with amines and amino acids. <i>Bioorganic and Medicinal Chemistry</i> , 2010 , 18, 1034-7	3.4	18
504	Inhibitors of HIV-1 protease: 10 years after. <i>Expert Opinion on Therapeutic Patents</i> , 2006 , 16, 1067-1091	6.8	18
503	Structural characterization and thermal stability of <i>Notothenia coriiceps</i> metallothionein. <i>Biochemical Journal</i> , 2001 , 354, 291-9	3.8	18
502	Are Carbonic Anhydrases Suitable Targets to Fight Protozoan Parasitic Diseases?. <i>Current Medicinal Chemistry</i> , 2018 , 25, 5266-5278	4.3	18
501	Novel sulphonamides incorporating triazene moieties show powerful carbonic anhydrase I and II inhibitory properties. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 325-329	5.6	18

500	-carbonic anhydrase: characterisation and effects of simple aromatic/heterocyclic sulphonamide inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 1545-1554	5.6	18
499	Carbonic Anhydrases: New Perspectives on Protein Functional Role and Inhibition in. <i>Frontiers in Microbiology</i> , 2021 , 12, 629163	5.7	18
498	Kinetic characterization of carbonic anhydrase immobilized on magnetic nanoparticles as biocatalyst for CO ₂ capture. <i>Biochemical Engineering Journal</i> , 2018 , 138, 1-11	4.2	18
497	Cloning, Purification, and Characterization of a β -Carbonic Anhydrase from , an Opportunistic Pathogen Involved in Dandruff and Seborrheic Dermatitis. <i>International Journal of Molecular Sciences</i> , 2019 , 20,	6.3	17
496	A non-catalytic function of carbonic anhydrase IX contributes to the glycolytic phenotype and pH regulation in human breast cancer cells. <i>Biochemical Journal</i> , 2019 , 476, 1497-1513	3.8	17
495	Pain Relieving Effect of-NSAIDs-CAIs Hybrid Molecules: Systemic and Intra-Articular Treatments against Rheumatoid Arthritis. <i>International Journal of Molecular Sciences</i> , 2019 , 20,	6.3	17
494	Synthesis of 3,4-dihydropyrrolidine-2,5-dione and 3,5-dihydroxybenzoic acid derivatives and evaluation of the carbonic anhydrase I and II inhibition. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 896-900	5.6	17
493	Tellurides Bearing Sulfonamides as Novel Inhibitors of Leishmanial Carbonic Anhydrase with Potent Antileishmanial Activity. <i>Journal of Medicinal Chemistry</i> , 2020 , 63, 4306-4314	8.3	17
492	Dual P-Glycoprotein and CA XII Inhibitors: A New Strategy to Reverse the P-gp Mediated Multidrug Resistance (MDR) in Cancer Cells. <i>Molecules</i> , 2020 , 25,	4.8	17
491	Activation studies with amines and amino acids of the β -carbonic anhydrase from the pathogenic protozoan <i>Leishmania donovani</i> chagasi. <i>Bioorganic Chemistry</i> , 2018 , 78, 406-410	5.1	17
490	Design, Synthesis, and X-ray of Selenides as New Class of Agents for Prevention of Diabetic Cerebrovascular Pathology. <i>ACS Medicinal Chemistry Letters</i> , 2018 , 9, 462-467	4.3	17
489	Sulfonamides incorporating heteropolycyclic scaffolds show potent inhibitory action against carbonic anhydrase isoforms I, II, IX and XII. <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 921-7	3.4	17
488	A computer-assisted discovery of novel potential anti-obesity compounds as selective carbonic anhydrase VA inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2019 , 181, 111565	6.8	17
487	Synthesis, biological evaluation and in silico studies with 4-benzylidene-2-phenyl-5(4H)-imidazolone-based benzenesulfonamides as novel selective carbonic anhydrase IX inhibitors endowed with anticancer activity. <i>Bioorganic Chemistry</i> , 2019 , 90, 103102	5.1	17
486	The role of carbonic anhydrase IX in hypoxia control in OSCC. <i>Journal of Oral Pathology and Medicine</i> , 2013 , 42, 1-8	3.3	17
485	Effect of incorporating a thiophene tail in the scaffold of acetazolamide on the inhibition of human carbonic anhydrase isoforms I, II, IX and XII. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013 , 23, 5646-9	2.9	17
484	Synthesis and biological profile of new 1,2,3,4-tetrahydroisoquinolines as selective carbonic anhydrase inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2011 , 19, 7003-7	3.4	17
483	Carbonic anhydrase activators: Activation of the beta-carbonic anhydrase from the pathogenic yeast <i>Candida glabrata</i> with amines and amino acids. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010 , 20, 1701-4	2.9	17

482	Effect of cadmium on gene expression in the liverwort <i>Lunularia cruciata</i> . <i>Gene</i> , 2005 , 356, 153-9	3.8	17
481	Quantum theoretic QSAR of benzene derivatives: some enzyme inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2004 , 19, 237-48	5.6	17
480	The zinc - but not cadmium - containing α -carbonic from the diatom <i>Thalassiosira weissflogii</i> is potently activated by amines and amino acids. <i>Bioorganic Chemistry</i> , 2018 , 80, 261-265	5.1	17
479	An overview on the recently discovered α -carbonic anhydrases. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 1988-1995	5.6	17
478	α -Carbonic anhydrases are strongly activated by spinaceamine derivatives. <i>Bioorganic and Medicinal Chemistry</i> , 2019 , 27, 800-804	3.4	16
477	Novel Diamide-Based Benzenesulfonamides as Selective Carbonic Anhydrase IX Inhibitors Endowed with Antitumor Activity: Synthesis, Biological Evaluation and In Silico Insights. <i>International Journal of Molecular Sciences</i> , 2019 , 20,	6.3	16
476	Hit Recycling: Discovery of a Potent Carbonic Anhydrase Inhibitor by in Silico Target Fishing. <i>ACS Chemical Biology</i> , 2015 , 10, 1964-9	4.9	16
475	New 4-[(3-cyclohexyl-4-aryl-2,3-dihydro-1,3-thiazol-2-ylidene)amino]benzene-1-sulfonamides, synthesis and inhibitory activity toward carbonic anhydrase I, II, IX, XII. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015 , 25, 3281-4	2.9	16
474	A new affinity gel for the purification of α -carbonic anhydrases. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 224-8	5.6	16
473	Perfluoroalkyl Substances of Significant Environmental Concern Can Strongly Inhibit Human Carbonic Anhydrase Isozymes. <i>Analytical Chemistry</i> , 2020 , 92, 4614-4622	7.8	16
472	Synthesis and biological evaluation of novel pyrazoline-based aromatic sulfamates with potent carbonic anhydrase isoforms II, IV and IX inhibitory efficacy. <i>Bioorganic Chemistry</i> , 2018 , 77, 633-639	5.1	16
471	Activation studies of the β and α -carbonic anhydrases from the pathogenic bacterium <i>Vibrio cholerae</i> with amines and amino acids. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 227-233	5.6	16
470	Supercharging protein ions in native mass spectrometry using theta capillary nanoelectrospray ionization mass spectrometry and cyclic alkylcarbonates. <i>Analytica Chimica Acta</i> , 2018 , 1003, 1-9	6.6	16
469	Activation studies with amines and amino acids of the α -carbonic anhydrase encoded by the Rv3273 gene from the pathogenic bacterium <i>Mycobacterium tuberculosis</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 364-369	5.6	16
468	The α -carbonic anhydrase from the pathogenic bacterium <i>Vibrio cholerae</i> is potently activated by amines and amino acids. <i>Bioorganic Chemistry</i> , 2018 , 77, 1-5	5.1	16
467	The first activation study of a α -carbonic anhydrase: TweCA from the diatom <i>Thalassiosira weissflogii</i> is effectively activated by amines and amino acids. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 680-685	5.6	16
466	Inhibition of β , γ and α -carbonic anhydrases from bacteria and diatoms with N'-aryl-N-hydroxy-ureas. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 1194-1198	5.6	16
465	-Carbonic Anhydrases: Novel Targets for Developing Antituberculosis Drugs. <i>International Journal of Molecular Sciences</i> , 2019 , 20,	6.3	16

464	Pseudomonas aeruginosa α -carbonic anhydrase, psCA1, is required for calcium deposition and contributes to virulence. <i>Cell Calcium</i> , 2019 , 84, 102080	4	16
463	Shading the TRF2 recruiting function: a new horizon in drug development. <i>Journal of the American Chemical Society</i> , 2014 , 136, 16708-11	16.4	16
462	Mono- and di-halogenated histamine, histidine and carnosine derivatives are potent carbonic anhydrase I, II, VII, XII and XIV activators. <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 4752-8	3.4	16
461	Substituted benzene sulfonamides incorporating 1,3,5-triazinyl moieties potently inhibit human carbonic anhydrases II, IX and XII. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014 , 24, 1310-4	2.9	16
460	Biochemical characterization of the chloroplastic α -carbonic anhydrase from <i>Flaveria bidentis</i> (L.) "Kuntze". <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2014 , 29, 500-4	5.6	16
459	Carbonic anhydrase inhibitors. Benzenesulfonamides incorporating cyanoacrylamide moieties strongly inhibit <i>Saccharomyces cerevisiae</i> α -carbonic anhydrase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013 , 23, 3570-5	2.9	16
458	A one-step procedure for immobilising the thermostable carbonic anhydrase (SspCA) on the surface membrane of <i>Escherichia coli</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 1120-1128	5.6	16
457	Benzenesulfonamides incorporating bulky aromatic/heterocyclic tails with potent carbonic anhydrase inhibitory activity. <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 7751-64	3.4	16
456	Carbonic anhydrase activators: activation of the beta-carbonic anhydrase Nce103 from the yeast <i>Saccharomyces cerevisiae</i> with amines and amino acids. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009 , 19, 1662-5	2.9	16
455	<i>Saccharomyces cerevisiae</i> α -carbonic anhydrase: inhibition and activation studies. <i>Current Pharmaceutical Design</i> , 2010 , 16, 3327-36	3.3	16
454	Carbonic anhydrase inhibitors: the inhibition profiles of the human mitochondrial isoforms VA and VB with anions are very different. <i>Bioorganic and Medicinal Chemistry</i> , 2007 , 15, 6742-7	3.4	16
453	Tissue-specific regulation of metallothionein and metallothionein mRNA accumulation in the Antarctic notothenioid, <i>Notothenia coriiceps</i> . <i>Polar Biology</i> , 2000 , 23, 17-23	2	16
452	Carbonic anhydrase inhibitors: N-cyanosulfonamides, a new class of high affinity isozyme II and IV inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 1999 , 14, 289-306		16
451	Inhibitory activity against carbonic anhydrase IX and XII as a candidate selection criterion in the development of new anticancer agents. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 1555-1561	5.6	16
450	Synthesis of novel benzenesulfonamide bearing 1,2,3-triazole linked hydroxy-trifluoromethylpyrazolines and hydrazones as selective carbonic anhydrase isoforms IX and XII inhibitors. <i>Bioorganic Chemistry</i> , 2019 , 85, 198-208	5.1	16
449	Exploring structural properties of potent human carbonic anhydrase inhibitors bearing a 4-(cycloalkylamino-1-carbonyl)benzenesulfonamide moiety. <i>European Journal of Medicinal Chemistry</i> , 2019 , 163, 443-452	6.8	16
448	Novel thiazolidinone-containing compounds, without the well-known sulphonamide zinc-binding group acting as human carbonic anhydrase IX inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 1299-1308	5.6	16
447	Acyl selenoureido benzenesulfonamides show potent inhibitory activity against carbonic anhydrases from the pathogenic bacterium <i>Vibrio cholerae</i> . <i>Bioorganic Chemistry</i> , 2017 , 75, 170-172	5.1	15

446	arginase: biochemical characterization and inhibition by naturally occurring phenolic substances. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 1100-1109	5.6	15
445	Acetazolamide protects steatotic liver grafts against cold ischemia reperfusion injury. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2015 , 355, 191-8	4.7	15
444	The Carbonic Anhydrase IX inhibitor SLC-0111 as emerging agent against the mesenchymal stem cell-derived pro-survival effects on melanoma cells. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 1185-1193	5.6	15
443	Mono- and di-thiocarbamate inhibition studies of the α -carbonic anhydrase TweCAI from the marine diatom <i>Thalassiosira weissflogii</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 707-713	5.6	15
442	Identification and inhibition of carbonic anhydrases from nematodes. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 176-184	5.6	15
441	1,2-Benzisothiazole Derivatives Bearing 4-, 5-, or 6-Alkyl/arylcarboxamide Moieties Inhibit Carbonic Anhydrase Isoform IX (CAIX) and Cell Proliferation under Hypoxic Conditions. <i>Journal of Medicinal Chemistry</i> , 2016 , 59, 6547-52	8.3	15
440	Dithiocarbamates with potent inhibitory activity against the <i>Saccharomyces cerevisiae</i> α -carbonic anhydrase. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 132-6	5.6	15
439	Inhibition of carbonic anhydrase isoforms I, II, IX and XII with secondary sulfonamides incorporating benzothiazole scaffolds. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1306-11	5.6	15
438	Fluorescent sulfonamide carbonic anhydrase inhibitors incorporating 1,2,3-triazole moieties: Kinetic and X-ray crystallographic studies. <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 104-12	3.4	15
437	The synthesis of (Z)-4-oxo-4-(arylamino)but-2-enoic acids derivatives and determination of their inhibition properties against human carbonic anhydrase I and II isoenzymes. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 939-45	5.6	15
436	Structure-activity relationship with pyrazoline-based aromatic sulfamates as carbonic anhydrase isoforms I, II, IX and XII inhibitors: Synthesis and biological evaluation. <i>European Journal of Medicinal Chemistry</i> , 2019 , 182, 111638	6.8	15
435	Synthesis of a new series of N-substituted 4-(2-aminoethyl)benzenesulfonamides and their inhibitory effect on human carbonic anhydrase cytosolic isozymes I and II and transmembrane tumor-associated isozymes IX and XII. <i>European Journal of Medicinal Chemistry</i> , 2014 , 84, 59-67	6.8	15
434	Carbonic anhydrase inhibitors. Synthesis of a novel series of 5-substituted 2,4-dichlorobenzenesulfonamides and their inhibition of human cytosolic isozymes I and II and the transmembrane tumor-associated isozymes IX and XII. <i>European Journal of Medicinal Chemistry</i> , 2014 , 82, 47-55	6.8	15
433	Anion inhibition studies of two α -carbonic anhydrases from <i>Lotus japonicus</i> , LjCAA1 and LjCAA2. <i>Journal of Inorganic Biochemistry</i> , 2014 , 136, 67-72	4.2	15
432	Dominant behaviours in the expression of human carbonic anhydrase hCA I activity. <i>Chemical Communications</i> , 2014 , 50, 8043-6	5.8	15
431	Carbonic anhydrase inhibitors: Synthesis and inhibition of the cytosolic mammalian carbonic anhydrase isoforms I, II and VII with benzene sulfonamides incorporating 4,5,6,7-tetrachlorophthalimide moiety. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 5168-74	3.4	15
430	Characterization, bioinformatic analysis and dithiocarbamate inhibition studies of two new α -carbonic anhydrases, CAH1 and CAH2, from the fruit fly <i>Drosophila melanogaster</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 1516-21	3.4	15
429	Carbonic anhydrase inhibitors. The nematode α -carbonic anhydrase of <i>Caenorhabditis elegans</i> CAH-4b is highly inhibited by 2-(hydrazinocarbonyl)-3-substituted-phenyl-1H-indole-5-sulfonamides. <i>Bioorganic and Medicinal Chemistry</i> , 2009 , 17, 3212-5	3.4	15

428	3-phenyl-1H-indole-5-sulfonamides: structure-based drug design of a promising class of carbonic anhydrase inhibitors. <i>Current Pharmaceutical Design</i> , 2010 , 16, 3317-26	3.3	15
427	PCR amplification and cloning of metallothionein complementary DNAs in temperate and Antarctic sea urchin characterized by a large difference in egg metallothionein content. <i>Cellular and Molecular Life Sciences</i> , 1997 , 53, 472-7	10.3	15
426	An Update on Natural Products with Carbonic Anhydrase Inhibitory Activity. <i>Current Pharmaceutical Design</i> , 2016 , 22, 1570-91	3.3	15
425	Expanding the anticancer potential of 1,2,3-triazoles via simultaneously targeting Cyclooxygenase-2, 15-lipoxygenase and tumor-associated carbonic anhydrases. <i>European Journal of Medicinal Chemistry</i> , 2020 , 200, 112439	6.8	15
424	Antibacterial activity of ethoxzolamide against strains SS1 and 26695. <i>Gut Pathogens</i> , 2020 , 12, 20	5.4	15
423	Comparison of the amine/amino acid activation profiles of the α and β carbonic anhydrases from the pathogenic bacterium <i>Burkholderia pseudomallei</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 25-30	5.6	15
422	Synthesis and inhibition potency of novel ureido benzenesulfonamides incorporating GABA as tumor-associated carbonic anhydrase IX and XII inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 205-11	5.6	14
421	Sulfonamide inhibition profiles of the β carbonic anhydrase from the pathogenic bacterium <i>Francisella tularensis</i> responsible of the febrile illness tularemia. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 3555-3561	3.4	14
420	Appraisal of anti-protozoan activity of nitroaromatic benzenesulfonamides inhibiting carbonic anhydrases from and. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 1164-1171	5.6	14
419	Novel 8-Substituted Coumarins That Selectively Inhibit Human Carbonic Anhydrase IX and XII. <i>International Journal of Molecular Sciences</i> , 2019 , 20,	6.3	14
418	Synthesis and carbonic anhydrase I, II, IX and XII inhibitory activity of sulfamates incorporating piperazinyl-ureido moieties. <i>Bioorganic and Medicinal Chemistry</i> , 2015 , 23, 5619-25	3.4	14
417	Coumarins from as inhibitors of the tumour-associated carbonic anhydrases IX and XII: isolation, biological studies and in silico evaluation. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 539-548	5.6	14
416	Pharmacological Inhibition of CA-IX Impairs Tumor Cell Proliferation, Migration and Invasiveness. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	14
415	Synthesis and carbonic anhydrase inhibition studies of sulfonamide based indole-1,2,3-triazole chalcone hybrids. <i>Bioorganic Chemistry</i> , 2020 , 99, 103839	5.1	14
414	Amino Acids as Building Blocks for Carbonic Anhydrase Inhibitors. <i>Metabolites</i> , 2018 , 8,	5.6	14
413	Synthesis of novel benzenesulfamide derivatives with inhibitory activity against human cytosolic carbonic anhydrase I and II and <i>Vibrio cholerae</i> β and β class enzymes. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 1125-1136	5.6	14
412	Inhibition of carbonic anhydrases by a substrate analog: benzyl carbamate directly coordinates the catalytic zinc ion mimicking bicarbonate binding. <i>Chemical Communications</i> , 2018 , 54, 10312-10315	5.8	14
411	Design, synthesis and biological activity of selective hCAs inhibitors based on 2-(benzylsulfinyl)benzoic acid scaffold. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 1400-1413	5.6	14

410	Primary mono- and bis-sulfonamides obtained via regiospecific sulfochlorination of N-arylpyrazoles: inhibition profile against a panel of human carbonic anhydrases. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 920-934	5.6	14
409	Natural product hybrid and its superacid synthesized analogues: dodoneine and its derivatives show selective inhibition of carbonic anhydrase isoforms I, III, XIII and XIV. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 3790-4	3.4	14
408	Inhibition of V-ATPase and carbonic anhydrases as interference strategy with tumor acidification processes. <i>Current Pharmaceutical Design</i> , 2012 , 18, 1407-13	3.3	14
407	Carbonic anhydrase inhibitors. Inhibition of the zinc and cobalt gamma-class enzyme from the archaeon <i>Methanosarcina thermophila</i> with anions. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2004 , 14, 3327-31	2.9	14
406	Structural and functional studies of vertebrate metallothioneins: cross-talk between domains in the absence of physical contact. <i>Biochemical Journal</i> , 2005 , 391, 95-103	3.8	14
405	Metal-binding proteins in eggs of various sea urchin species. <i>Cell Biology International</i> , 1994 , 18, 47-53	4.5	14
404	The Role of Selenium in Pathologies: An Updated Review.. <i>Antioxidants</i> , 2022 , 11,	7.1	14
403	Bioisosteric Development of Multitarget Nonsteroidal Anti-Inflammatory Drug-Carbonic Anhydrases Inhibitor Hybrids for the Management of Rheumatoid Arthritis. <i>Journal of Medicinal Chemistry</i> , 2020 , 63, 2325-2342	8.3	14
402	Synthesis and carbonic anhydrase inhibitory properties of novel 4-(2-aminoethyl)benzenesulfonamide-dipeptide conjugates. <i>Bioorganic Chemistry</i> , 2019 , 83, 414-423	5.1	14
401	-Nitrosulfonamides as Carbonic Anhydrase Inhibitors: A Promising Chemotype for Targeting Chagas Disease and Leishmaniasis. <i>ACS Medicinal Chemistry Letters</i> , 2019 , 10, 413-418	4.3	14
400	Benzoxepinones: A new isoform-selective class of tumor associated carbonic anhydrase inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2020 , 28, 115496	3.4	14
399	Multitargeting approaches involving carbonic anhydrase inhibitors: hybrid drugs against a variety of disorders. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 1702-1714	5.6	14
398	Carbonic Anhydrase Inhibitors as Novel Drugs against Mycobacterial β -Carbonic Anhydrases: An Update on and Studies. <i>Molecules</i> , 2018 , 23,	4.8	14
397	Tuning the Dual Inhibition of Carbonic Anhydrase and Cyclooxygenase by Dihydrothiazole Benzenesulfonamides. <i>ACS Medicinal Chemistry Letters</i> , 2018 , 9, 1045-1050	4.3	14
396	Phaeodactylum tricornutum as a model organism for testing the membrane penetrability of sulphonamide carbonic anhydrase inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 510-518	5.6	13
395	Activation of human β -carbonic anhydrase isoforms I, II, IV and VII with bis-histamine schiff bases and bis-spinaceamine substituted derivatives. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 1193-1198	5.6	13
394	Pyridazinone-substituted benzenesulfonamides display potent inhibition of membrane-bound human carbonic anhydrase IX and promising antiproliferative activity against cancer cell lines. <i>European Journal of Medicinal Chemistry</i> , 2019 , 168, 301-314	6.8	13
393	Carbonic Anhydrases: Versatile and Useful Biocatalysts in Chemistry and Biochemistry. <i>Catalysts</i> , 2020 , 10, 1008	4	13

392	Synthesis of calix[4]azacrown substituted sulphonamides with antioxidant, acetylcholinesterase, butyrylcholinesterase, tyrosinase and carbonic anhydrase inhibitory action. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 1215-1223	5.6	13
391	Tail approach synthesis of novel benzenesulfonamides incorporating 1,3,4-oxadiazole hybrids as potent inhibitor of carbonic anhydrase I, II, IX, and XII isoenzymes. <i>European Journal of Medicinal Chemistry</i> , 2020 , 193, 112219	6.8	13
390	Sulfonamide Inhibition Studies of an α -Carbonic Anhydrase from , a Platyhelminth Parasite Responsible for Schistosomiasis. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	13
389	Multicomponent chemistry in the synthesis of carbonic anhydrase inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 185-199	5.6	13
388	Synthesis and carbonic anhydrase I, II, IV and XII inhibitory properties of N-protected amino acid - sulfonamide conjugates. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1476-83	5.6	13
387	Recombinant thermoactive phosphoenolpyruvate carboxylase (PEPC) from <i>Thermosynechococcus elongatus</i> and its coupling with mesophilic/thermophilic bacterial carbonic anhydrases (CAs) for the conversion of CO ₂ to oxaloacetate. <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 220-5	3.4	13
386	The human carbonic anhydrase isoenzymes I and II inhibitory effects of some hydroperoxides, alcohols, and acetates. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1248-53	5.6	13
385	Discovery of potent anti-convulsant carbonic anhydrase inhibitors: Design, synthesis, in vitro and in vivo appraisal. <i>European Journal of Medicinal Chemistry</i> , 2018 , 156, 430-443	6.8	13
384	Synthesis of novel dipeptide sulfonamide conjugates with effective carbonic anhydrase I, II, IX, and XII inhibitory properties. <i>Bioorganic Chemistry</i> , 2018 , 81, 311-318	5.1	13
383	Nitroimidazole-based inhibitors DTP338 and DTP348 are safe for zebrafish embryos and efficiently inhibit the activity of human CA IX in <i>Xenopus</i> oocytes. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 1064-1073	5.6	13
382	Integration between Super-capacitors and ZEBRA Batteries as High Performance Hybrid Storage System for Electric Vehicles. <i>Energy Procedia</i> , 2017 , 105, 2539-2544	2.3	13
381	Inhibition of carbonic anhydrase isoforms I, II, IX and XII with Schiff's bases incorporating iminoureido moieties. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 901-7	5.6	13
380	Laboratory Bench to Test ZEBRA Battery Plus Super-Capacitor Based Propulsion Systems for Urban Electric Transportation. <i>Energy Procedia</i> , 2015 , 75, 1956-1961	2.3	13
379	Inhibition of α -carbonic anhydrases from <i>Brucella suis</i> with C-cinnamoyl glycosides incorporating the phenol moiety. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 1017-20	5.6	13
378	Monoclonal antibodies raised against 167-180 aa sequence of human carbonic anhydrase XII inhibit its enzymatic activity. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2014 , 29, 804-10	5.6	13
377	Carbonic anhydrase inhibitors: the membrane-associated isoform XV is highly inhibited by inorganic anions. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009 , 19, 1155-8	2.9	13
376	Aspartic proteinases in Antarctic fish. <i>Marine Genomics</i> , 2009 , 2, 1-10	1.9	13
375	Novel benzofuran-based sulphonamides as selective carbonic anhydrases IX and XII inhibitors: synthesis and biological evaluation. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 298-305	5.6	13

374	Chagas Disease: Perspectives on the Past and Present and Challenges in Drug Discovery. <i>Molecules</i> , 2020 , 25,	4.8	13
373	Catechols: a new class of carbonic anhydrase inhibitors. <i>Chemical Communications</i> , 2020 , 56, 13033-13036	5.8	13
372	Comprehensive study on potent and selective carbonic anhydrase inhibitors: Synthesis, bioactivities and molecular modelling studies of 4-(3-(2-arylidenehydrazine-1-carbonyl)-5-(thiophen-2-yl)-1H-pyrazole-1-yl) benzenesulfonamides. <i>European Journal of Medicinal Chemistry</i> , 2021 , 217, 113351	6.8	13
371	Identification of N-phenyl-2-(phenylsulfonyl)acetamides/propanamides as new SLC-0111 analogues: Synthesis and evaluation of the carbonic anhydrase inhibitory activities. <i>European Journal of Medicinal Chemistry</i> , 2021 , 218, 113360	6.8	13
370	Synthesis carbonic anhydrase enzyme inhibition and antioxidant activity of novel benzothiazole derivatives incorporating glycine, methionine, alanine, and phenylalanine moieties. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 343-349	5.6	13
369	The antibiotic furagin and its derivatives are isoform-selective human carbonic anhydrase inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 1011-1020	5.6	13
368	Protease inhibitors targeting the main protease and papain-like protease of coronaviruses. <i>Expert Opinion on Therapeutic Patents</i> , 2021 , 31, 309-324	6.8	13
367	Anion inhibition studies of the Zn(II)-bound β -carbonic anhydrase from the Gram-negative bacterium. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 372-376	5.6	13
366	Discovering a new class of antifungal agents that selectively inhibits microbial carbonic anhydrases. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 1537-1544	5.6	13
365	Fibrate-based N-acylsulphonamides targeting carbonic anhydrases: synthesis, biochemical evaluation, and docking studies. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 1051-1061	5.6	12
364	Extrinsic acidosis suppresses glycolysis and migration while increasing network formation in pulmonary microvascular endothelial cells. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2019 , 317, L188-L201	5.8	12
363	Dendrimers incorporating benzenesulfonamide moieties strongly inhibit carbonic anhydrase isoforms I-XIV. <i>Organic and Biomolecular Chemistry</i> , 2015 , 13, 6453-7	3.9	12
362	The Effect of Substituted Benzene-Sulfonamides and Clinically Licensed Drugs on the Catalytic Activity of CynT2, a Carbonic Anhydrase Crucial for Life Cycle. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	12
361	Plasmatic carbonic anhydrase IX as a diagnostic marker for clear cell renal cell carcinoma. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 234-240	5.6	12
360	Synthesis and bioactivity studies of 1-aryl-3-(2-hydroxyethylthio)-1-propanones. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 105-109	5.6	12
359	Synthesis, characterization and carbonic anhydrase inhibitory activity of novel benzothiazole derivatives. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1221-5	5.6	12
358	Inhibitory effects of benzimidazole containing new phenolic Mannich bases on human carbonic anhydrase isoforms hCA I and II. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1540-4	5.6	12
357	Activation studies with amines and amino acids of the β -carbonic anhydrase from the pathogenic protozoan <i>Trypanosoma cruzi</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2018 , 26, 4187-4190	3.4	12

356	Human carbonic anhydrases 2019 , 151-185		12
355	Structural study of the location of the phenyl tail of benzene sulfonamides and the effect on human carbonic anhydrase inhibition. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 6674-80	3.4	12
354	Five- and Six-Membered Nitrogen-Containing Compounds as Selective Carbonic Anhydrase Activators. <i>Molecules</i> , 2017 , 22,	4.8	12
353	Cloning, characterization and anion inhibition studies of a β -carbonic anhydrase from the Antarctic cyanobacterium <i>Nostoc commune</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015 , 25, 4970-4975	2.9	12
352	Hydrophobic substituents of the phenylmethylsulfamide moiety can be used for the development of new selective carbonic anhydrase inhibitors. <i>BioMed Research International</i> , 2014 , 2014, 523210	3	12
351	Identification of a high-molecular-weight cadmium-binding protein in copper-resistant <i>Bacillus acidocaldarius</i> cells. <i>Research in Microbiology</i> , 1996 , 147, 287-96	4	12
350	Design, synthesis, inhibition and toxicological evaluation of human carbonic anhydrases I, II and IX inhibitors in 5-nitroimidazole series. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 109-117	5.6	12
349	Synthesis and biological evaluation of some coumarin hybrids as selective carbonic anhydrase IX and XII inhibitors. <i>Bioorganic Chemistry</i> , 2020 , 104, 104272	5.1	12
348	Inhibition of bacterial β - and γ -class carbonic anhydrases with selenazoles incorporating benzenesulfonamide moieties. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 244-249	5.6	12
347	Sulphonamide inhibition studies of the β -carbonic anhydrase from the bacterial pathogen <i>Clostridium perfringens</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 31-36	5.6	12
346	Dioxygen, an unexpected carbonic anhydrase ligand. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 999-1005	5.6	12
345	Selenides bearing benzenesulfonamide show potent inhibition activity against carbonic anhydrases from pathogenic bacteria <i>Vibrio cholerae</i> and <i>Burkholderia pseudomallei</i> . <i>Bioorganic Chemistry</i> , 2018 , 79, 319-322	5.1	12
344	Kinetic properties and affinities for sulfonamide inhibitors of an β -carbonic anhydrase (CruCA4) involved in coral biomineralization in the Mediterranean red coral <i>Corallium rubrum</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 3525-3530	3.4	11
343	3D QSAR studies, pharmacophore modeling, and virtual screening of diarylpyrazole-benzenesulfonamide derivatives as a template to obtain new inhibitors, using human carbonic anhydrase II as a model protein. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 688-700	5.6	11
342	Synthesis and biological evaluation of novel 8-substituted quinoline-2-carboxamides as carbonic anhydrase inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 1172-1177	5.6	11
341	Synthesis of thio- and seleno-acetamides bearing benzenesulfonamide as potent inhibitors of human carbonic anhydrase II and XII. <i>Bioorganic Chemistry</i> , 2019 , 89, 102984	5.1	11
340	An AGT-based protein-tag system for the labelling and surface immobilization of enzymes on <i>E. coli</i> outer membrane. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 490-499	5.6	11
339	A failed tentative to design a super carbonic anhydrase having the biochemical properties of the most thermostable CA (SspCA) and the fastest (SazCA) enzymes. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 989-94	5.6	11

338	Development of oxathiino[6,5-b]pyridine 2,2-dioxide derivatives as selective inhibitors of tumor-related carbonic anhydrases IX and XII. <i>European Journal of Medicinal Chemistry</i> , 2020 , 200, 112300	6.8	11
337	Design, synthesis and biological evaluation of coumarin linked 1,2,4-oxadiazoles as selective carbonic anhydrase IX and XII inhibitors. <i>Bioorganic Chemistry</i> , 2020 , 98, 103739	5.1	11
336	1,2,4-Triazole-based anticonvulsant agents with additional ROS scavenging activity are effective in a model of pharmacoresistant epilepsy. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 993-1002	5.6	11
335	Development of Thiazolidinones as Fungal Carbonic Anhydrase Inhibitors. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	11
334	Sulfonamide inhibition studies of the β -carbonic anhydrase from the Antarctic bacterium <i>Colwellia psychrerythraea</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016 , 26, 1253-9	2.9	11
333	New anthranilic acid-incorporating N-benzenesulfonamidophthalimides as potent inhibitors of carbonic anhydrases I, II, IX, and XII: Synthesis, in vitro testing, and in silico assessment. <i>European Journal of Medicinal Chemistry</i> , 2019 , 181, 111573	6.8	11
332	Carbonic anhydrases 2019 , 3-16		11
331	Multivalent Carbonic Anhydrases Inhibitors. <i>International Journal of Molecular Sciences</i> , 2019 , 20,	6.3	11
330	Inhibition of carbonic anhydrase isoforms I, II, IX and XII with novel Schiff bases: identification of selective inhibitors for the tumor-associated isoforms over the cytosolic ones. <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 5883-90	3.4	11
329	Kinetic and in silico analysis of thiazolidin-based inhibitors of β -carbonic anhydrase isoenzymes. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2013 , 28, 370-4	5.6	11
328	Cloning, expression and purification of the β -carbonic anhydrase from the mantle of the Mediterranean mussel, <i>Mytilus galloprovincialis</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 1029-1035	5.6	11
327	Anion inhibition profiles of the β -carbonic anhydrase from the pathogenic bacterium <i>Burkholderia pseudomallei</i> responsible of melioidosis and highly drug resistant to common antibiotics. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 575-580	3.4	11
326	Synthesis of rhodamine B-benzenesulfonamide conjugates and their inhibitory activity against human β and bacterial/fungal β -carbonic anhydrases. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011 , 21, 5210-3	2.9	11
325	Carbonic anhydrase activators. Activation of the membrane-associated isoform XV with amino acids and amines. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009 , 19, 3430-3	2.9	11
324	Carbonic Anhydrases: An Overview 2015 , 3-13		11
323	Benzimidazole derivatives as potent and isoform selective tumor-associated carbonic anhydrase IX/XII inhibitors. <i>Bioorganic Chemistry</i> , 2020 , 95, 103544	5.1	11
322	inhibition of γ -carbonic anhydrase 3 with Mono- and dithiocarbamates and evaluation of their toxicity using zebrafish developing embryos. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 65-71	5.6	11
321	Carbonic anhydrase IX as a novel candidate in liquid biopsy. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 255-260	5.6	11

320	Aryl derivatives of 3H-1,2-benzoxathiepine 2,2-dioxide as carbonic anhydrase inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 245-254	5.6	11
319	Sulfonamide/sulfamate switch with a series of piperazinylureido derivatives: Synthesis, kinetic and in silico evaluation as carbonic anhydrase isoforms I, II, IV, and IX inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2020 , 186, 111896	6.8	11
318	Structural Basis of Nanomolar Inhibition of Tumor-Associated Carbonic Anhydrase IX: X-Ray Crystallographic and Inhibition Study of Lipophilic Inhibitors with Acetazolamide Backbone. <i>Journal of Medicinal Chemistry</i> , 2020 , 63, 13064-13075	8.3	11
317	Ninhydrins inhibit carbonic anhydrases directly binding to the metal ion. <i>European Journal of Medicinal Chemistry</i> , 2021 , 209, 112875	6.8	11
316	Unprotected primary sulfonamide group facilitates ring-forming cascade en route to polycyclic [1,4]oxazepine-based carbonic anhydrase inhibitors. <i>Bioorganic Chemistry</i> , 2018 , 76, 140-146	5.1	11
315	Novel benzenesulfonamides aryl and arylsulfone conjugates adopting tail/dual tail approaches: Synthesis, carbonic anhydrase inhibitory activity and molecular modeling studies. <i>European Journal of Medicinal Chemistry</i> , 2021 , 221, 113486	6.8	11
314	Lead Development of Thiazolylsulfonamides with Carbonic Anhydrase Inhibitory Action. <i>Journal of Medicinal Chemistry</i> , 2017 , 60, 3154-3164	8.3	10
313	Synthesis of an acridine orange sulfonamide derivative with potent carbonic anhydrase IX inhibitory action. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 701-706	5.6	10
312	Appliance of the piperidinyl-hydrazidoureido linker to benzenesulfonamide compounds: Synthesis, in vitro and in silico evaluation of potent carbonic anhydrase II, IX and XII inhibitors. <i>Bioorganic Chemistry</i> , 2020 , 98, 103728	5.1	10
311	Activation Effects of Carnosine- and Histidine-Containing Dipeptides on Human Carbonic Anhydrases: A Comprehensive Study. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	10
310	Anion Inhibition Studies of the Beta-Carbonic Anhydrase from. <i>Molecules</i> , 2020 , 25,	4.8	10
309	Synthesis of some N-aroyle-2-oxindole benzenesulfonamide conjugates with carbonic anhydrase inhibitory activity. <i>Bioorganic Chemistry</i> , 2020 , 96, 103635	5.1	10
308	Benzylaminoethyureido-Tailed Benzenesulfonamides: Design, Synthesis, Kinetic and X-ray Investigations on Human Carbonic Anhydrases. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	10
307	Protonography and anion inhibition profile of the β -carbonic anhydrase (CruCA4) identified in the Mediterranean red coral <i>Corallium rubrum</i> . <i>Bioorganic Chemistry</i> , 2018 , 76, 281-287	5.1	10
306	Interaction of anions with a newly characterized alpha carbonic anhydrase from <i>Halomonas</i> sp. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1119-23	5.6	10
305	Development of a Fingerprint-Based Scoring Function for the Prediction of the Binding Mode of Carbonic Anhydrase II Inhibitors. <i>International Journal of Molecular Sciences</i> , 2018 , 19,	6.3	10
304	Benzamide-4-Sulfonamides Are Effective Human Carbonic Anhydrase I, II, VII, and IX Inhibitors. <i>Metabolites</i> , 2018 , 8,	5.6	10
303	Anion Inhibition Profile of the β -Carbonic Anhydrase from the Opportunist Pathogenic Fungus Involved in Dandruff and Seborrheic Dermatitis. <i>Metabolites</i> , 2019 , 9,	5.6	10

302	Arylamino bisphosphonates: potent and selective inhibitors of the tumor-associated carbonic anhydrase XII. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014 , 24, 1941-3	2.9	10
301	Anion inhibitors of the α -carbonic anhydrase from the pathogenic bacterium responsible of tularemia, <i>Francisella tularensis</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 4800-4804	3.4	10
300	5-Substituted-benzylsulfanyl-thiophene-2-sulfonamides with effective carbonic anhydrase inhibitory activity: Solution and crystallographic investigations. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 857-863	3.4	10
299	Exploration of anionic inhibition of the α -carbonic anhydrase from <i>Thiomicrospira crunogena</i> XCL-2 gammaproteobacterium: A potential bio-catalytic agent for industrial CO ₂ removal. <i>Chemical Engineering Science</i> , 2015 , 138, 575-580	4.4	10
298	Sulfonamide inhibition studies of the α -carbonic anhydrase from <i>Drosophila melanogaster</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014 , 24, 2797-801	2.9	10
297	The leader peptide of a human rec. MnSOD as molecular carrier which delivers high amounts of Cisplatin into tumor cells inducing a fast apoptosis in vitro. <i>International Journal of Cancer</i> , 2011 , 128, 453-9	7.5	10
296	Carbonic anhydrase inhibitors: binding of indanesulfonamides to the human isoform II. <i>ChemMedChem</i> , 2008 , 3, 473-7	3.7	10
295	Crystallization and preliminary X-ray analysis of the monomeric Cu,Zn superoxide dismutase from <i>Escherichia coli</i> . <i>Protein Science</i> , 1996 , 5, 2125-7	6.3	10
294	Development of Novel Quinoline-Based Sulfonamides as Selective Cancer-Associated Carbonic Anhydrase Isoform IX Inhibitors. <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	10
293	Selective Inhibition of Carbonic Anhydrases by Carvacrol and Thymol Could Impair Biofilm Production and the Release of Outer Membrane Vesicles. <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	10
292	Discovery of Potent Carbonic Anhydrase Inhibitors as Effective Anticonvulsant Agents: Drug Design, Synthesis, and In Vitro and In Vivo Investigations. <i>Journal of Medicinal Chemistry</i> , 2021 , 64, 3100-3114	8.3	10
291	Effect of Sulfonamides and Their Structurally Related Derivatives on the Activity of α -Carbonic Anhydrase from. <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	10
290	Exponential Activation of Carbonic Anhydrase by Encapsulation in Dynameric Host Matrices with Chiral Discrimination. <i>Chemistry - A European Journal</i> , 2018 , 24, 715-720	4.8	10
289	Characterization of technical grade carbonic anhydrase as biocatalyst for CO ₂ capture in potassium carbonate solutions 2018 , 8, 279-291		10
288	Investigation of 3-sulfamoyl coumarins against cancer-related IX and XII isoforms of human carbonic anhydrase as well as cancer cells leads to the discovery of 2-oxo-2H-benzo[h]chromene-3-sulfonamide - A new caspase-activating proapoptotic agent. <i>European Journal of Medicinal Chemistry</i> , 2021 , 222, 113589	6.8	10
287	Investigating the antiplasmodial activity of primary sulfonamide compounds identified in open source malaria data. <i>International Journal for Parasitology: Drugs and Drug Resistance</i> , 2017 , 7, 61-70	4	9
286	Click-tailed benzenesulfonamides as potent bacterial carbonic anhydrase inhibitors for targeting <i>Mycobacterium tuberculosis</i> and <i>Vibrio cholerae</i> . <i>Bioorganic Chemistry</i> , 2019 , 86, 183-186	5.1	9
285	Indole-Based Hydrazones Containing A Sulfonamide Moiety as Selective Inhibitors of Tumor-Associated Human Carbonic Anhydrase Isoforms IX and XII. <i>International Journal of Molecular Sciences</i> , 2019 , 20,	6.3	9

284	Novel 2-indolinones containing a sulfonamide moiety as selective inhibitors of candida β -carbonic anhydrase enzyme. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 528-531	5.6	9
283	Phosphate Chemical Probes Designed for Location Specific Inhibition of Intracellular Carbonic Anhydrases. <i>Journal of Medicinal Chemistry</i> , 2015 , 58, 7580-90	8.3	9
282	7-Acylamino-3H-1,2-benzoxathiepine 2,2-dioxides as new isoform-selective carbonic anhydrase IX and XII inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 650-656	5.6	9
281	Evaluation of Thio- and Seleno-Acetamides Bearing Benzenesulfonamide as Inhibitor of Carbonic Anhydrases from Different Pathogenic Bacteria. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	9
280	Sulfonamide Inhibition Profile of the β -Carbonic Anhydrase from , An Opportunistic Pathogen Triggering Scalp Conditions. <i>Metabolites</i> , 2020 , 10,	5.6	9
279	Synthesis of N'-phenyl-N-hydroxyureas and investigation of their inhibitory activities on human carbonic anhydrases. <i>Bioorganic Chemistry</i> , 2018 , 78, 1-6	5.1	9
278	Sulfonamide inhibition studies of two β -carbonic anhydrases from the ascomycete fungus <i>Sordaria macrospora</i> , CAS1 and CAS2. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 390-396	5.6	9
277	Microwave assisted synthesis of novel acridine-acetazolamide conjugates and investigation of their inhibition effects on human carbonic anhydrase isoforms hCA I, II, IV and VII. <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 3548-55	3.4	9
276	Synthesis 4-[2-(2-mercapto-4-oxo-4H-quinazolin-3-yl)-ethyl]-benzenesulfonamides with subnanomolar carbonic anhydrase II and XII inhibitory properties. <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 4100-4107	3.4	9
275	Development of 3-(4-aminosulphonyl)-phenyl-2-mercapto-3H-quinazolin-4-ones as inhibitors of carbonic anhydrase isoforms involved in tumorigenesis and glaucoma. <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 1402-7	3.4	9
274	Bis-benzoxaboroles: Design, Synthesis, and Biological Evaluation as Carbonic Anhydrase Inhibitors. <i>ACS Medicinal Chemistry Letters</i> , 2019 , 10, 1205-1210	4.3	9
273	QSAR studies of sulfamate and sulfamide inhibitors targeting human carbonic anhydrase isozymes I, II, IX and XII. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 1404-9	3.4	9
272	Hydroxylamine-O-sulfonamide is a versatile lead compound for the development of carbonic anhydrase inhibitors. <i>Chemical Communications</i> , 2015 , 51, 11519-22	5.8	9
271	Microbial enzyme: applications in industry and in bioremediation. <i>Enzyme Research</i> , 2012 , 2012, 980681	2.4	9
270	Zinc Binding Functions in the Design of Carbonic Anhydrase Inhibitors	39-72	9
269	Arylsulfonyl-N,N-dialkyl-dithiocarbamates as tumor cell growth inhibitors: novel agents targeting beta-tubulin?. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2001 , 16, 55-63		9
268	Metal Complexes of 1,3,4-Thiadiazole-2,5-Disulfonamide are Strong Dual Carbonic Anhydrase Inhibitors, although the Ligand Possesses very Weak such Properties. <i>Metal-Based Drugs</i> , 1995 , 2, 331-6		9
267	Antiproliferative effects of sulphonamide carbonic anhydrase inhibitors C18, SLC-0111 and acetazolamide on bladder, glioblastoma and pancreatic cancer cell lines.. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 280-286	5.6	9

266	State of the Art on Carbonic Anhydrase Modulators for Biomedical Purposes. <i>Current Medicinal Chemistry</i> , 2019 , 26, 2558-2573	4.3	9
265	Pyrrolo and pyrrolopyrimidine sulfonamides act as cytotoxic agents in hypoxia via inhibition of transmembrane carbonic anhydrases. <i>European Journal of Medicinal Chemistry</i> , 2020 , 188, 112021	6.8	9
264	Benzoxaboroles: New Potent Inhibitors of the Carbonic Anhydrases of the Pathogenic Bacterium. <i>ACS Medicinal Chemistry Letters</i> , 2020 , 11, 2277-2284	4.3	9
263	Synthesis of two phloroglucinol derivatives with cinnamyl moieties as inhibitors of the carbonic anhydrase isozymes I and II: an in vitro study. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 208-212	5.6	9
262	1,2,4-Trisubstituted imidazolinones with dual carbonic anhydrase and p38 mitogen-activated protein kinase inhibitory activity. <i>Bioorganic Chemistry</i> , 2019 , 82, 109-116	5.1	9
261	Synthesis and Biological Evaluation of Imidazo[2,1-b]Thiazole based Sulfonyl Piperazines as Novel Carbonic Anhydrase II Inhibitors. <i>Metabolites</i> , 2020 , 10,	5.6	9
260	Is carbonic anhydrase inhibition useful as a complementary therapy of Covid-19 infection?. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 1230-1235	5.6	9
259	Improving the carbonic anhydrase inhibition profile of the sulfamoylphenyl pharmacophore by attachment of carbohydrate moieties. <i>Bioorganic Chemistry</i> , 2018 , 76, 61-66	5.1	9
258	Deciphering the key heterocyclic scaffolds in targeting microtubules, kinases and carbonic anhydrases for cancer drug development. <i>Pharmacology & Therapeutics</i> , 2021 , 225, 107860	13.9	9
257	Thermostability enhancement of the Carbonic anhydrase from <i>Sulfolobus solfataricus</i> by using the anchoring-and-self-labelling-protein-tag system (ASL). <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 946-954	5.6	8
256	Use of an immobilised thermostable -CA (SspCA) for enhancing the metabolic efficiency of the freshwater green microalga. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 913-920	5.6	8
255	Iodoquinazolinones bearing benzenesulfonamide as human carbonic anhydrase I, II, IX and XII inhibitors: Synthesis, biological evaluation and radiosensitizing activity. <i>European Journal of Medicinal Chemistry</i> , 2020 , 200, 112449	6.8	8
254	New coumarin/sulfocoumarin linked phenylacrylamides as selective transmembrane carbonic anhydrase inhibitors: Synthesis and in-vitro biological evaluation. <i>Bioorganic and Medicinal Chemistry</i> , 2020 , 28, 115586	3.4	8
253	New thiopyrimidine-benzenesulfonamide conjugates as selective carbonic anhydrase II inhibitors: synthesis, in vitro biological evaluation, and molecular docking studies. <i>Bioorganic and Medicinal Chemistry</i> , 2020 , 28, 115329	3.4	8
252	Synthesis and Biological Evaluation of 4-Sulfamoylphenyl/Sulfocoumarin Carboxamides as Selective Inhibitors of Carbonic Anhydrase Isoforms hCA II, IX, and XII. <i>ChemMedChem</i> , 2018 , 13, 1165-1171	3.7	8
251	Fluorobenzenesulfonamides: N-sulphonylurea isosteres showing nanomolar selective cancer-related transmembrane human carbonic anhydrase inhibition. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 804-808	5.6	8
250	Chemometric modeling of breast cancer associated carbonic anhydrase IX inhibitors belonging to the ureido-substituted benzene sulfonamide class. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2014 , 29, 877-83	5.6	8
249	Development of sulfonamides incorporating phenylacrylamido functionalities as carbonic anhydrase isoforms I, II, IX and XII inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 5726-5732	3.4	8

248	Carbonic anhydrase I, II, IV and IX inhibition with a series of 7-amino-3,4-dihydroquinolin-2(1H)-one derivatives. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 885-892	5.6	8
247	In silico modeling of Carbonic anhydrase inhibitors from the fungus <i>Malassezia globosa</i> as antidandruff agents. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 417-24	5.6	8
246	Discovery of 2,4-thiazolidinedione-tethered coumarins as novel selective inhibitors for carbonic anhydrase IX and XII isoforms.. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 531-541	5.6	8
245	Synthesis and selective inhibitory effects of some 2-oxindole benzenesulfonamide conjugates on human carbonic anhydrase isoforms CA I, CA II, CA IX and CAXII. <i>Bioorganic Chemistry</i> , 2020 , 95, 103514	5.1	8
244	Inhibition of the newly discovered Carbonic anhydrase from the protozoan pathogen <i>Trichomonas vaginalis</i> with inorganic anions and small molecules. <i>Journal of Inorganic Biochemistry</i> , 2020 , 213, 111274	4.2	8
243	Sulphonamide inhibition profile of Carbonic anhydrase. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 1834-1839	5.6	8
242	Activation studies of the Carbonic anhydrases from with amino acids and amines. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 1379-1386	5.6	8
241	Discovery of a novel series of indolylchalcone-benzenesulfonamide hybrids acting as selective carbonic anhydrase II inhibitors. <i>Bioorganic Chemistry</i> , 2021 , 108, 104647	5.1	8
240	Advances in the discovery of novel agents for the treatment of glaucoma. <i>Expert Opinion on Drug Discovery</i> , 2021 , 16, 1209-1225	6.2	8
239	New sulfonamides containing organometallic-acylhydrazones: synthesis, characterisation and biological evaluation as inhibitors of human carbonic anhydrases. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 451-458	5.6	8
238	A structure-based approach towards the identification of novel antichagasic compounds: carbonic anhydrase inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 21-30	5.6	8
237	Handling drug-target selectivity: A study on ureido containing Carbonic Anhydrase inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2021 , 212, 113035	6.8	8
236	Selective inhibition of carbonic anhydrase IX and XII by coumarin and psoralen derivatives. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 685-692	5.6	8
235	Activation of carbonic anhydrase isoforms involved in modulation of emotional memory and cognitive disorders with histamine agonists, antagonists and derivatives. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 719-726	5.6	8
234	Seeking new approach for therapeutic treatment of cholera disease via inhibition of bacterial carbonic anhydrases: experimental and theoretical studies for sixteen benzenesulfonamide derivatives. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 1186-1192	5.6	7
233	Design of a Hybrid Propulsion Architecture for Midsized Boats. <i>Energy Procedia</i> , 2019 , 158, 2954-2959	2.3	7
232	Synthesis of a new series of 3-functionalised-1-phenyl-1,2,3-triazole sulfamoylbenzamides as carbonic anhydrase I, II, IV and IX inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 1199-1209	5.6	7
231	Activation Studies of the Carbonic Anhydrases from the Antarctic Marine Bacteria and with Amino Acids and Amines. <i>Marine Drugs</i> , 2019 , 17,	6	7

230	Activation Studies of the β -Carbonic Anhydrase from the Pathogenic Protozoan with Amino Acids and Amines. <i>Metabolites</i> , 2019 , 9,	5.6	7
229	Exploring QSARs of some benzenesulfonamides incorporating cyanoacrylamide moieties as a carbonic anhydrase inhibitors (specifically against tumor-associated isoforms IX and XII). <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 519-23	5.6	7
228	Inhibition studies of <i>Brucella suis</i> β -carbonic anhydrases with a series of 4-substituted pyridine-3-sulphonamides. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 255-259	5.6	7
227	Comparison of the Anion Inhibition Profiles of the β -CA Isoforms (SpiCA1, SpiCA2 and SpiCA3) from the Scleractinian Coral <i>Stylophora pistillata</i> . <i>International Journal of Molecular Sciences</i> , 2018 , 19,	6.3	7
226	Extending the β -class carbonic anhydrases inhibition profiles with phenolic compounds. <i>Bioorganic Chemistry</i> , 2019 , 93, 103336	5.1	7
225	Targeting Carbonic Anhydrases 2014 ,		7
224	Bortezomib inhibits mammalian carbonic anhydrases. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 5064-5067	5.1	7
223	Purification and inhibition studies with anions and sulfonamides of an β -carbonic anhydrase from the Antarctic seal <i>Leptonychotes weddellii</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2011 , 19, 1847-51	3.4	7
222	Fungal and Nematode Carbonic Anhydrases: Their Inhibition in Drug Design		7
221	Discovery of new carbonic anhydrase IX inhibitors as anticancer agents by tuning the hydrophobic and hydrophilic rims of the active site to encounter the dual-tail approach.. <i>European Journal of Medicinal Chemistry</i> , 2022 , 232, 114190	6.8	7
220	Phosphoramidates are the first phosphorus-based zinc binding motif to show inhibition of β -class carbonic anhydrases from bacteria, fungi, and protozoa. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 59-64	5.6	7
219	Novel insights on saccharin- and acesulfame-based carbonic anhydrase inhibitors: design, synthesis, modelling investigations and biological activity evaluation. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 1891-1905	5.6	7
218	Synthesis and carbonic anhydrase inhibitory effects of new N-glycosylsulfonamides incorporating the phenol moiety. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016 , 26, 3892-5	2.9	7
217	(Hetero)aryl substituted thiazol-2,4-yl scaffold as human carbonic anhydrase I, II, VII and XIV activators. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 224-229	5.6	7
216	Phenols from L. and L. and their activity against carbonic anhydrase. <i>Natural Product Research</i> , 2021 , 1-7	2.3	7
215	Sulfonamide Inhibition Studies of a New β -Carbonic Anhydrase from the Pathogenic Protozoan. <i>International Journal of Molecular Sciences</i> , 2018 , 19,	6.3	7
214	Cloning, Characterization and Anion Inhibition Studies of a β -Carbonic Anhydrase from the Pathogenic Protozoan. <i>Molecules</i> , 2018 , 23,	4.8	7
213	Binding site comparison for coumarin inhibitors and amine/amino acid activators of human carbonic anhydrases. <i>European Journal of Medicinal Chemistry</i> , 2021 , 226, 113875	6.8	7

212	Novel triazole-sulfonamide bearing pyrimidine moieties with carbonic anhydrase inhibitory action: Design, synthesis, computational and enzyme inhibition studies. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2021 , 48, 128249	2.9	7
211	Inhibition of α and β carbonic anhydrases from the pathogenic bacterium with aromatic sulphonamides and clinically licenced drugs - a joint docking/molecular dynamics study. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 469-479	5.6	7
210	4-(3-Alkyl/benzyl-guanidino)benzenesulfonamides as selective carbonic anhydrase VII inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 1568-1576	5.6	7
209	Expression and characterization of a recombinant psychrophilic β carbonic anhydrase (NcoCA) identified in the genome of the Antarctic cyanobacteria belonging to the genus Nostoc. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 810-7	5.6	6
208	Comparison of the anion inhibition profiles of the α and β carbonic anhydrases from the pathogenic bacterium Burkholderia pseudomallei. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 2010-2014	5.4	6
207	Exploration of the residues modulating the catalytic features of human carbonic anhydrase XIII by a site-specific mutagenesis approach. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 1506-1510	5.6	6
206	Synthesis and exploration of 2-morpholino-4-phenylthiazol-5-yl acrylamide derivatives for their effects against carbonic anhydrase I, II, IX and XII isoforms as a non-sulfonamide class of inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2019 , 27, 115090	3.4	6
205	Carbonic Anhydrase Inhibitor-NO Donor Hybrids and Their Pharmacological Applications 2019 , 229-242		6
204	Synthesis of pro-apoptotic indapamide derivatives as anticancer agents. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 967-80	5.6	6
203	Structural and biochemical characterization of novel carbonic anhydrases from Phaeodactylum tricornutum. <i>Acta Crystallographica Section D: Structural Biology</i> , 2020 , 76, 676-686	5.5	6
202	Bioorganometallic derivatives of 4-hydrazino-benzenesulphonamide as carbonic anhydrase inhibitors: synthesis, characterisation and biological evaluation. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 622-628	5.6	6
201	Sulfonamide carbonic anhydrase inhibitors: Zinc coordination and tail effects influence inhibitory efficacy and selectivity for different isoforms. <i>Inorganica Chimica Acta</i> , 2018 , 470, 128-132	2.7	6
200	Sulfonamides incorporating piperazine bioisosteres as potent human carbonic anhydrase I, II, IV and IX inhibitors. <i>Bioorganic Chemistry</i> , 2019 , 91, 103130	5.1	6
199	The first activation study of the β carbonic anhydrases from the pathogenic bacteria and with amines and amino acids. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 1178-1185	5.6	6
198	Cloning, characterization and sulfonamide inhibition studies of an β carbonic anhydrase from the living fossil sponge Astrosclera willeyana. <i>Bioorganic and Medicinal Chemistry</i> , 2012 , 20, 1403-10	3.4	6
197	Carbonic Anhydrase Protects Fatty Liver Grafts against Ischemic Reperfusion Damage. <i>PLoS ONE</i> , 2015 , 10, e0134499	3.7	6
196	N-glycosyl-N-hydroxysulfamides as potent inhibitors of Brucella suis carbonic anhydrases. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2015 , 30, 1010-2	5.6	6
195	Novel antibody to a carbonic anhydrase: patent evaluation of WO2011138279A1. <i>Expert Opinion on Therapeutic Patents</i> , 2013 , 23, 757-60	6.8	6

194	Crystallographic Studies on Carbonic Anhydrases from Fungal Pathogens for Structure-Assisted Drug Development 323-333		6
193	Coumarins effectively inhibit bacterial β -carbonic anhydrases.. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 333-338	5.6	6
192	Repurposing FDA-approved sulphonamide carbonic anhydrase inhibitors for treatment of .. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 51-61	5.6	6
191	Synthesis and Applications of Organic Selenols. <i>Advanced Synthesis and Catalysis</i> , 2021 , 363, 5360	5.6	6
190	Inhibition survey with phenolic compounds against the β and γ class carbonic anhydrases from the marine diatom and protozoan. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 377-382	5.6	6
189	Synthesis and human carbonic anhydrase I, II, VA, and XII inhibition with novel amino acid-sulphonamide conjugates. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 489-497	5.6	6
188	Effects of New NSAID-CAI Hybrid Compounds in Inflammation and Lung Fibrosis. <i>Biomolecules</i> , 2020 , 10,	5.9	6
187	In Silico-Guided Identification of New Potent Inhibitors of Carbonic Anhydrases Expressed in. <i>ACS Medicinal Chemistry Letters</i> , 2020 , 11, 2294-2299	4.3	6
186	Quinoline-sulfamoyl carbamates/sulfamide derivatives: Synthesis, cytotoxicity, carbonic anhydrase activity, and molecular modelling studies. <i>Bioorganic Chemistry</i> , 2021 , 110, 104778	5.1	6
185	Inhibition of Carbonic Anhydrase IX Promotes Apoptosis through Intracellular pH Level Alterations in Cervical Cancer Cells. <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	6
184	Comparison of blood carbonic anhydrase activity of athletes performing interval and continuous running exercise at high altitude. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 218-224	5.6	6
183	Radiotracers for positron emission tomography (PET) targeting tumour-associated carbonic anhydrase isoforms. <i>European Journal of Medicinal Chemistry</i> , 2021 , 213, 113046	6.8	6
182	Anion inhibition studies of the β -carbonic anhydrases from. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 1061-1066	5.6	6
181	Exploring of tumor-associated carbonic anhydrase isoenzyme IX and XII inhibitory effects and cytotoxicities of the novel N-aryl-1-(4-sulfamoylphenyl)-5-(thiophen-2-yl)-1H-pyrazole-3-carboxamides. <i>Bioorganic Chemistry</i> , 2021 , 115, 105194	5.1	6
180	Natural inspired piperine-based sulfonamides and carboxylic acids as carbonic anhydrase inhibitors: Design, synthesis and biological evaluation. <i>European Journal of Medicinal Chemistry</i> , 2021 , 225, 113800	6.8	6
179	The three-tails approach as a new strategy to improve selectivity of action of sulphonamide inhibitors against tumour-associated carbonic anhydrase IX and XII.. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 930-939	5.6	6
178	Exploring new structural features of the 4-[(3-methyl-4-aryl-2,3-dihydro-1,3-thiazol-2-ylidene)amino]benzenesulphonamide scaffold for the inhibition of human carbonic anhydrases. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 1526-1533	5.6	5
177	Crystal Structure of a Tetrameric Type II β -Carbonic Anhydrase from the Pathogenic Bacterium. <i>Molecules</i> , 2020 , 25,	4.8	5

176	Synthetic Strategies and Computational Inhibition Activity Study for Triazinyl-Substituted Benzenesulfonamide Conjugates with Polar and Hydrophobic Amino Acids as Inhibitors of Carbonic Anhydrases. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	5
175	Anion inhibition studies of a beta carbonic anhydrase from the malaria mosquito <i>Anopheles gambiae</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 359-363	5.6	5
174	Investigation of piperazines as human carbonic anhydrase I, II, IV and VII activators. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 303-308	5.6	5
173	A new hexapeptide from the leader peptide of rMnSOD enters cells through the oestrogen receptor to deliver therapeutic molecules. <i>Scientific Reports</i> , 2016 , 6, 18691	4.9	5
172	Sulfonamide inhibition studies of the β -carbonic anhydrase from the newly discovered bacterium <i>Enterobacter</i> sp. B13. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016 , 26, 1821-6	2.9	5
171	Cloning, expression and biochemical characterization of a β -carbonic anhydrase from the soil bacterium <i>Enterobacter</i> sp. B13. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2016 , 31, 1111-8	5.6	5
170	Synthesis, X-ray structure, in silico calculation, and carbonic anhydrase inhibitory properties of benzylimidazole metal complexes. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2018 , 33, 1150-1159	5.6	5
169	Experimental Analysis of a Zebra Battery Based Propulsion System for Urban Bus under Dynamic Conditions. <i>Energy Procedia</i> , 2014 , 61, 1138-1141	2.3	5
168	Anion inhibition studies of an β -carbonic anhydrase from the living fossil <i>Astrosclera willeyana</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012 , 22, 1314-6	2.9	5
167	Human Carbonic Anhydrases: Catalytic Properties, Structural Features, and Tissue Distribution 2015 , 17-30		5
166	Post-translational modifications in tumor-associated carbonic anhydrases. <i>Amino Acids</i> , 2021 ,	3.5	5
165	Amine- and Amino Acid-Based Compounds as Carbonic Anhydrase Activators. <i>Molecules</i> , 2021 , 26,	4.8	5
164	Microbiota, Bacterial Carbonic Anhydrases, and Modulators of Their Activity: Links to Human Diseases?. <i>Mediators of Inflammation</i> , 2021 , 2021, 6926082	4.3	5
163	Exploring benzoxaborole derivatives as carbonic anhydrase inhibitors: a structural and computational analysis reveals their conformational variability as a tool to increase enzyme selectivity. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019 , 34, 1498-1505	5.6	5
162	A Highlight on the Inhibition of Fungal Carbonic Anhydrases as Drug Targets for the Antifungal Armamentarium. <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	5
161	Preparation, carbonic anhydrase enzyme inhibition and antioxidant activity of novel 7-amino-3,4-dihydroquinolin-2(1H)-one derivatives incorporating mono or dipeptide moiety. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 1021-1026	5.6	5
160	Activation of carbonic anhydrases from human brain by amino alcohol oxime ethers: towards human carbonic anhydrase VII selective activators. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 48-57	5.6	5
159	An anion and small molecule inhibition study of the β -carbonic anhydrase from. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 1088-1092	5.6	5

158	A case study of a DC-microgrid for the smart integration of renewable sources with the urban electric mobility 2018 ,		5
157	Bacterial carbonic anhydrases: underexploited antibacterial therapeutic targets. <i>Future Medicinal Chemistry</i> , 2021 , 13, 1619-1622	4.1	5
156	Carbonic Anhydrases: Off Targets, Add-On Activities, or Emerging Novel Targets?459-491		5
155	Isocoumarins: a new class of selective carbonic anhydrase IX and XII inhibitors.. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 743-748	5.6	5
154	4-Anilinoquinazoline-based benzenesulfonamides as nanomolar inhibitors of carbonic anhydrase isoforms I, II, IX, and XII: design, synthesis, , and biological studies.. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 994-1004	5.6	5
153	Novel 3-(6-methylpyridin-2-yl)coumarin-based chalcones as selective inhibitors of cancer-related carbonic anhydrases IX and XII endowed with anti-proliferative activity.. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 1043-1052	5.6	5
152	A decade of tail-approach based design of selective as well as potent tumor associated carbonic anhydrase inhibitors. <i>Bioorganic Chemistry</i> , 2022 , 126, 105920	5.1	5
151	Dual targeting of cancer-related human matrix metalloproteinases and carbonic anhydrases by chiral N-(biarylsulfonyl)-phosphonic acids. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2017 , 32, 1260-1264	5.6	4
150	Power architectures for the integration of photovoltaic generation systems in DC-microgrids. <i>Energy Procedia</i> , 2019 , 159, 34-41	2.3	4
149	Benzenesulfonamides incorporating nitrogenous bases show effective inhibition of carbonic anhydrases from the pathogenic fungi <i>Cryptococcus neoformans</i> , <i>Candida glabrata</i> and <i>Malassezia globosa</i> . <i>Bioorganic Chemistry</i> , 2019 , 86, 39-43	5.1	4
148	Effect of Carbonic Anhydrase IX inhibitors on human endothelial cell survival. <i>Pharmacological Research</i> , 2020 , 159, 104964	10.2	4
147	Amide derivatives of benzene-sulfonanilide, pharmaceutical composition thereof and method for cancer treatment using the same (US20120095092). <i>Expert Opinion on Therapeutic Patents</i> , 2012 , 22, 1251-5	6.8	4
146	Botulinus Toxin, Tetanus Toxin, and Anthrax Lethal Factor Inhibitors705-720		4
145	Metal detoxification and homeostasis in Antarctic Notothenioids. A comparative survey on evolution, expression and functional properties of fish and mammal metallothioneins. <i>Reviews in Environmental Science and Biotechnology</i> , 2006 , 5, 253-267	13.9	4
144	Natural inspired ligustrazine-based SLC-0111 analogues as novel carbonic anhydrase inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2021 , 228, 114008	6.8	4
143	Benzylaminoethylureido-Tailed Benzenesulfonamides Show Potent Inhibitory Activity against Bacterial Carbonic Anhydrases. <i>ChemMedChem</i> , 2020 , 15, 2444-2447	3.7	4
142	Toxicity evaluation of sulfamides and coumarins that efficiently inhibit human carbonic anhydrases. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 1765-1772	5.6	4
141	Coronaviruses. <i>Expert Opinion on Therapeutic Patents</i> , 2021 , 31, 291-294	6.8	4

140	Benzyl alcohol inhibits carbonic anhydrases by anchoring to the zinc coordinated water molecule. <i>Biochemical and Biophysical Research Communications</i> , 2021 , 548, 217-221	3.4	4
139	Small-molecule CD73 inhibitors for the immunotherapy of cancer: a patent and literature review (2017-present). <i>Expert Opinion on Therapeutic Patents</i> , 2021 , 31, 867-876	6.8	4
138	Experimental set-up of DC PEV charging station supported by open and interoperable communication technologies 2016 ,		4
137	3-Aminobenzenesulfonamides incorporating acylthiourea moieties selectively inhibit the tumor-associated carbonic anhydrase isoform IX over the off-target isoforms I, II and IV. <i>Bioorganic Chemistry</i> , 2019 , 82, 123-128	5.1	4
136	Activation studies of the β -carbonic anhydrases from with amines and amino acids. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 824-830	5.6	4
135	Anti-breast cancer action of carbonic anhydrase IX inhibitor 4-[4-(4-Benzo[1,3]dioxol-5-ylmethyl-piperazin-1-yl)-benzylidene-hydrazinocarbonyl]-benzenesulfonamide (BSM-0004): and studies. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 954-963	5.6	4
134	Zeta-carbonic anhydrases show CS hydrolase activity: A new metabolic carbon acquisition pathway in diatoms?. <i>Computational and Structural Biotechnology Journal</i> , 2021 , 19, 3427-3436	6.8	4
133	Modulating the Efficacy of Carbonic Anhydrase Inhibitors through Fluorine Substitution. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 23068-23082	16.4	4
132	Determination of intracellular protein-ligand binding affinity by competition binding in-cell NMR. <i>Acta Crystallographica Section D: Structural Biology</i> , 2021 , 77, 1270-1281	5.5	4
131	Synthesis, Crystal Structure, Inhibitory Activity and Molecular Docking of Coumarins/Sulfonamides Containing Triazolyl Pyridine Moiety as Potent Selective Carbonic Anhydrase IX and XII Inhibitors. <i>Crystals</i> , 2021 , 11, 1076	2.3	4
130	Protective effects of carbonic anhydrase inhibition in brain ischaemia and models. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 964-976	5.6	4
129	Drug Screening in Human Cells by NMR Spectroscopy Allows the Early Assessment of Drug Potency. <i>Angewandte Chemie</i> , 2020 , 132, 6597-6601	3.6	4
128	Aromatic Sulfonamides including a Sulfonic Acid Tail: New Membrane Impermeant Carbonic Anhydrase Inhibitors for Targeting Selectively the Cancer-Associated Isoforms.. <i>International Journal of Molecular Sciences</i> , 2021 , 23,	6.3	4
127	Cloning, purification, kinetic and anion inhibition studies of a recombinant β -carbonic anhydrase from the Atlantic salmon parasite platyhelminth <i>Gyrodactylus salaris</i> . <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 1577-1586	5.6	4
126	Novel method of treating macular degeneration: a patent evaluation (WO2018/107005). <i>Expert Opinion on Therapeutic Patents</i> , 2019 , 29, 749-752	6.8	3
125	Comparison of the Sulfonamide Inhibition Profiles of the β -Carbonic Anhydrase Isoforms (SpiCA1, SpiCA2 and SpiCA3) Encoded by the Genome of the Scleractinian Coral. <i>Marine Drugs</i> , 2019 , 17,	6	3
124	Synthesis and carbonic anhydrase activating properties of a series of 2-amino-imidazolines structurally related to clonidine. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 1003-1010	5.6	3
123	Anion Inhibition Studies of the β -Class Carbonic Anhydrase CAS3 from the Filamentous Ascomycete. <i>Metabolites</i> , 2020 , 10,	5.6	3

122	Synthesis, computational studies and assessment of inhibitory activity of umbelliferon-based compounds against tumour-associated carbonic anhydrase isoforms IX and XII. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 1442-1449	5.6	3
121	Sulfonamide Inhibition Studies of the β -Class Carbonic Anhydrase CAS3 from the Filamentous Ascomycete. <i>Molecules</i> , 2020 , 25,	4.8	3
120	Aryl-4,5-dihydro-1-pyrazole-1-carboxamide Derivatives Bearing a Sulfonamide Moiety Show Single-digit Nanomolar-to-Subnanomolar Inhibition Constants against the Tumor-associated Human Carbonic Anhydrases IX and XII. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	3
119	CA IX stratification based on cancer treatment: a patent evaluation of US2016/0002350. <i>Expert Opinion on Therapeutic Patents</i> , 2016 , 26, 1105-1109	6.8	3
118	Activation Profile Analysis of CruCA4, an β -Carbonic Anhydrase Involved in Skeleton Formation of the Mediterranean Red Coral, <i>Corallium rubrum</i> . <i>Molecules</i> , 2017 , 23,	4.8	3
117	Extending the Inhibition Profiles of Coumarin-Based Compounds Against Human Carbonic Anhydrases: Synthesis, Biological, and In Silico Evaluation. <i>Molecules</i> , 2019 , 24,	4.8	3
116	Carbonic Anhydrase Activators. Part 19 Spectroscopic and Kinetic Investigations for the Interaction of Isozymes I and II With Primary Amines. <i>Metal-Based Drugs</i> , 1997 , 4, 221-7		3
115	Isolation and characterisation of zinc-binding proteins distinct from metallothionein from the eggs of the sea urchin <i>Strongylocentrotus intermedius</i> . <i>Marine Biology</i> , 1996 , 126, 225-230	2.5	3
114	Chagas Disease: Drug Development and Parasite Targets. <i>Topics in Medicinal Chemistry</i> , 2022 , 1	0.4	3
113	Inhibition studies of bacterial β -carbonic anhydrases with phenols.. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 666-671	5.6	3
112	2-Aminobenzoxazole-appended coumarins as potent and selective inhibitors of tumour-associated carbonic anhydrases.. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 168-177	5.6	3
111	Application of the dual-tail approach for the design and synthesis of novel Thiopyrimidine-Benzenesulfonamide hybrids as selective carbonic anhydrase inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2021 , 228, 114004	6.8	3
110	Synthesis, biological evaluation, and in silico studies of potential activators of apoptosis and carbonic anhydrase inhibitors on isatin-5-sulfonamide scaffold.. <i>European Journal of Medicinal Chemistry</i> , 2021 , 228, 113997	6.8	3
109	Inhibition of the β -Carbonic anhydrase from the protozoan pathogen with sulphonamides. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 329-334	5.6	3
108	Role of Carbonic Anhydrase in Cerebral Ischemia and Carbonic Anhydrase Inhibitors as Putative Protective Agents. <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	3
107	Insertion of metal carbenes into the anilinic N-H bond of unprotected aminobenzenesulfonamides delivers low nanomolar inhibitors of human carbonic anhydrase IX and XII isoforms. <i>European Journal of Medicinal Chemistry</i> , 2021 , 218, 113352	6.8	3
106	Structural Insights into Carbonic Anhydrase (SmCA) Inhibition by Selenoureido-Substituted Benzenesulfonamides. <i>Journal of Medicinal Chemistry</i> , 2021 , 64, 10418-10428	8.3	3
105	Activation of the β -Carbonic anhydrase from the protozoan pathogen with amines and amino acids. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 758-763	5.6	3

104	PEG Linker Length Strongly Affects Tumor Cell Killing by PEGylated Carbonic Anhydrase Inhibitors in Hypoxic Carcinomas Expressing Carbonic Anhydrase IX. <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	3
103	Effect of amino acids and amines on the activity of the recombinant α -carbonic anhydrase from the Gram-negative bacterium. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 1000-1006	5.6	3
102	Performance evaluation of an all-electric waterbus supplied by hybrid energy storage systems 2018 ,		3
101	New Sulfanilamide Derivatives Incorporating Heterocyclic Carboxamide Moieties as Carbonic Anhydrase Inhibitors. <i>Pharmaceuticals</i> , 2021 , 14,	5.2	3
100	Quantum mechanical study on the activation mechanism of human carbonic anhydrase VII cluster model with bis-histamine schiff bases and bis-spinaceamine derivatives. <i>Bioorganic and Medicinal Chemistry</i> , 2021 , 44, 116276	3.4	3
99	Inhibition of <i>Schistosoma mansoni</i> carbonic anhydrase by the antiparasitic drug clorsulon: X-ray crystallographic and in vitro studies.. <i>Acta Crystallographica Section D: Structural Biology</i> , 2022 , 78, 321-327	5.5	3
98	Perfusion-Based Bioreactor Culture and Isothermal Microcalorimetry for Preclinical Drug Testing with the Carbonic Anhydrase Inhibitor SLC-0111 in Patient-Derived Neuroblastoma.. <i>International Journal of Molecular Sciences</i> , 2022 , 23,	6.3	3
97	Novel 1,3,5-Triazinyl Aminobenzenesulfonamides Incorporating Aminoalcohol, Aminoalcone and Aminostilbene Structural Motifs as Potent Anti-VRE Agents, and Carbonic Anhydrases I, II, VII, IX, and XII Inhibitors.. <i>International Journal of Molecular Sciences</i> , 2021 , 23,	6.3	3
96	Insights into the effect of elaborating coumarin-based aryl enamines with sulfonamide or carboxylic acid functionality on carbonic anhydrase inhibitory potency and selectivity. <i>Bioorganic Chemistry</i> , 2022 , 126, 105888	5.1	3
95	Acatalytic Carbonic Anhydrases (CAs VIII, X, XI) 2015 , 239-245		2
94	Bacterial Carbonic Anhydrases as Drug Targets 2015 , 275-288		2
93	New Dihydrothiazole Benzenesulfonamides: Looking for Selectivity toward Carbonic Anhydrase Isoforms I, II, IX, and XII. <i>ACS Medicinal Chemistry Letters</i> , 2020 , 11, 852-856	4.3	2
92	A class of carbonic anhydrase IX/XII - selective carboxylate inhibitors. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2020 , 35, 549-554	5.6	2
91	Bioactive Natural Product and Superacid Chemistry for Lead Compound Identification: A Case Study of Selective hCA III and L-Type Ca Current Inhibitors for Hypotensive Agent Discovery. <i>Molecules</i> , 2017 , 22,	4.8	2
90	Sequence Analysis, Kinetic Constants, and Anion Inhibition Profile of the Nacrein-Like Protein (CgiNAP2X1) from the Pacific Oyster <i>Magallana gigas</i> (Ex- <i>Crassostrea gigas</i>). <i>Marine Drugs</i> , 2017 , 15,	6	2
89	Bacterial Carbonic Anhydrases. <i>Topics in Medicinal Chemistry</i> , 2016 , 135-152	0.4	2
88	Systems engineering approach for eco-comparison among power-train configurations of hybrid bus 2016 ,		2
87	Immobilization of carbonic anhydrase for biomimetic CO ₂ capture in slurry absorber. <i>New Biotechnology</i> , 2014 , 31, S20-S21	6.4	2

86	A molecular carrier to transport and deliver cisplatin into endometrial cancer cells. <i>Chemical Biology and Drug Design</i> , 2012 , 80, 9-16	2.9	2
85	Carbonic Anhydrase II as Target for Drug Design 2015 , 51-90		2
84	Protozoan, fungal and bacterial carbonic anhydrases targeting for obtaining anti-infectives 2014 , 132-141		2
83	Complexes with biologically active ligands. Part 4. Coordination compounds of chlorothiazide with transition metal ions behave as strong carbonic anhydrase inhibitors. <i>Metal-Based Drugs</i> , 1996 , 3, 79-83		2
82	Glyco-Coated CdSe/ZnS Quantum Dots as Nanoprobes for Carbonic Anhydrase IX Imaging in Cancer Cells.. <i>ACS Applied Nano Materials</i> , 2021 , 4, 14153-14160	5.6	2
81	Accumulation of untranslated metallothionein mRNA in antarctic hemoglobinless fish (icefish) 1999 , 167-172		2
80	Nontargeted Identification of Plasma Proteins O-, N-, and S-Transmethylated by O-Methyl Organophosphates. <i>Analytical Chemistry</i> , 2020 , 92, 15420-15428	7.8	2
79	Synthesis, Computational Studies and Assessment of in Vitro Activity of Squalene Derivatives as Carbonic Anhydrase Inhibitors. <i>ChemMedChem</i> , 2020 , 15, 2052-2057	3.7	2
78	Multitargeting application of proline-derived peptidomimetics addressing cancer-related human matrix metalloproteinase 9 and carbonic anhydrase II. <i>European Journal of Medicinal Chemistry</i> , 2021 , 214, 113260	6.8	2
77	Synthesis and Biological Evaluation of Coumarin-Linked 4-Anilinomethyl-1,2,3-Triazoles as Potent Inhibitors of Carbonic Anhydrases IX and XIII Involved in Tumorigenesis. <i>Metabolites</i> , 2021 , 11,	5.6	2
76	Taurultams incorporating arylsulfonamide: First in Vitro inhibition studies of H and E class Carbonic Anhydrases from <i>Vibrio cholerae</i> and <i>Burkholderia pseudomallei</i> . <i>European Journal of Medicinal Chemistry</i> , 2021 , 219, 113444	6.8	2
75	Tetrahydroquinazole-based secondary sulphonamides as carbonic anhydrase inhibitors: synthesis, biological evaluation against isoforms I, II, IV, and IX, and computational studies. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 1874-1883	5.6	2
74	Design and synthesis of benzenesulfonamide-linked imidazo[2,1-b][1,3,4]thiadiazole derivatives as carbonic anhydrase I and II inhibitors. <i>Archiv Der Pharmazie</i> , 2021 , 354, e2100028	4.3	2
73	Synthesis of new 7-amino-3,4-dihydroquinolin-2(1H)-one-peptide derivatives and their carbonic anhydrase enzyme inhibition, antioxidant, and cytotoxic activities. <i>Archiv Der Pharmazie</i> , 2021 , 354, e2100122	4.3	2
72	Evaluating the efficiency of enzyme accelerated CO capture: chemical kinetics modelling for interpreting measurement results. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 394-401	5.6	2
71	Designing of Novel Carbonic Anhydrase Inhibitors and Activators. <i>Current Medicinal Chemistry Cardiovascular and Hematological Agents</i> , 2004 , 2, 51-70		2
70	Challenges and Promises for Obtaining New Antiprotozoal Drugs: What's Going Wrong?. <i>Topics in Medicinal Chemistry</i> , 2021 , 1	0.4	2
69	Synthesis, molecular modelling and QSAR study of new phenylacetamide-2-oxoindole benzenesulfonamide conjugates as carbonic anhydrase inhibitors with antiproliferative activity.. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 701-717	5.6	2

68	Dithiocarbamates effectively inhibit the β -carbonic anhydrase from .. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 1-8	5.6	2
67	Heterologous expression and biochemical characterisation of the recombinant β -carbonic anhydrase (MpaCA) from the warm-blooded vertebrate pathogen .. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 62-68	5.6	2
66	The inhibitory effect of boric acid on hypoxia-regulated tumour-associated carbonic anhydrase IX.. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 1340-1345	5.6	2
65	Selective inhibition of carbonic anhydrase IX by sulphonylated 1,2,3-triazole incorporated benzenesulphonamides capable of inducing apoptosis. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 1454-1463	5.6	2
64	Anticancer carbonic anhydrase inhibitors: a patent and literature update 2018-2022. <i>Expert Opinion on Therapeutic Patents</i> , 1-15	6.8	2
63	Dihydropteroate Synthase (Sulfonamides) and Dihydrofolate Reductase Inhibitors 2019 , 163-172		1
62	Anion and sulfonamide inhibition studies of an β -carbonic anhydrase from the Antarctic hemoglobinless fish <i>Chionodraco hamatus</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015 , 25, 5485-9	2.9	1
61	Carbonic anhydrase from extremophiles and their potential use in biotechnological applications 2020 , 295-306		1
60	Looking toward the Rim of the Active Site Cavity of Druggable Human Carbonic Anhydrase Isoforms. <i>ACS Medicinal Chemistry Letters</i> , 2020 , 11, 1000-1005	4.3	1
59	Protozoan Carbonic Anhydrases. <i>Topics in Medicinal Chemistry</i> , 2016 , 111-133	0.4	1
58	Sulfonamide inhibition studies of the β -carbonic anhydrase from the gammaproteobacterium <i>Thiomicrospira crunogena</i> XCL-2, TcruCA. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016 , 26, 401-405	2.9	1
57	Mechanism of action of carbonic anhydrase inhibitors 2019 , 245-255		1
56	β -Carbonic anhydrases 2019 , 107-129		1
55	Developing Novel Bacterial Targets: Carbonic Anhydrases as Antibacterial Drug Targets 2014 , 31-46		1
54	Targeting carbonic anhydrases in biotechnology 2014 , 158-169		1
53	Therapeutic compounds: patent evaluation of WO2011011652A1. <i>Expert Opinion on Therapeutic Patents</i> , 2011 , 21, 1491-5	6.8	1
52	Introduction to Zinc Enzymes as Drug Targets 1-12		1
51	Metallothionein in Antarctic notothenioids: Genetic polymorphism and differential gene expression. <i>Italian Journal of Zoology</i> , 2000 , 67, 13-20		1

50	Complexes With Biologically Active Ligands. Part 2. Preparation of Copper(II) Complexes of Positively-Charged Derivatives of Aminoglutethimide. <i>Metal-Based Drugs</i> , 1996 , 3, 57-62		1
49	Targeting Carbonic Anhydrases from <i>Trypanosoma cruzi</i> and <i>Leishmania</i> spp. as a Therapeutic Strategy to Obtain New Antiprotozoal Drugs. <i>Topics in Medicinal Chemistry</i> , 2021 , 1	0.4	1
48	Coumarins inhibit β -class carbonic anhydrase from .. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 680-685	5.6	1
47	Carbonic Anhydrase Inhibition with Sulfonamides Incorporating Pyrazole- and Pyridazinecarboxamide Moieties Provides Examples of Isoform-Selective Inhibitors. <i>Molecules</i> , 2021 , 26,	4.8	1
46	Biochemical and structural characterization of beta-carbonic anhydrase from the parasite <i>Trichomonas vaginalis</i> . <i>Journal of Molecular Medicine</i> , 2021 , 1	5.5	1
45	Design and development of novel series of indole-3-sulfonamide ureido derivatives as selective carbonic anhydrase II inhibitors. <i>Archiv Der Pharmazie</i> , 2021 , e2100333	4.3	1
44	Novel benzenesulfonamide-bearing pyrazoles and 1,2,4-thiadiazoles as selective carbonic anhydrase inhibitors. <i>Archiv Der Pharmazie</i> , 2021 , e2100241	4.3	1
43	Metallothionein in Antarctic Fish 1998 , 151-161		1
42	A measurement system for the evaluation of efficiency of enzyme accelerated CO ₂ capture systems based on modeling 2020 ,		1
41	Chromene-Containing Aromatic Sulfonamides with Carbonic Anhydrase Inhibitory Properties. <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	1
40	Synthesis of Azasugar-Sulfonamide conjugates and their Evaluation as Inhibitors of Carbonic Anhydrases: the Azasugar Approach to Selectivity. <i>European Journal of Organic Chemistry</i> , 2021 , 2021, 2604-2614	3.2	1
39	Synthesis and Human Carbonic Anhydrase I, II, IX, and XII Inhibition Studies of Sulphonamides Incorporating Mono-, Bi- and Tricyclic Imide Moieties. <i>Pharmaceuticals</i> , 2021 , 14,	5.2	1
38	Biochemical profiling of anti-HIV prodrug Elsofavirine (Elpida) and its active form VM1500A against a panel of twelve human carbonic anhydrase isoforms. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2021 , 36, 1056-1060	5.6	1
37	Carbonic Anhydrase IV Selective Inhibitors Counteract the Development of Colitis-Associated Visceral Pain in Rats. <i>Cells</i> , 2021 , 10,	7.9	1
36	Biological investigation of -methyl thiosemicarbazones as antimicrobial agents and bacterial carbonic anhydrases inhibitors.. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 986-993	5.6	1
35	5-(Sulfamoyl)thien-2-yl 1,3-oxazole inhibitors of carbonic anhydrase II with hydrophilic periphery.. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 1005-1011	5.6	1
34	Perspectives on the design and discovery of β -ketoamide inhibitors for the treatment of novel coronavirus: where do we stand and where do we go?. <i>Expert Opinion on Drug Discovery</i> , 2022 , 1-11	6.2	1
33	Exploration of 2-phenylquinoline-4-carboxamide linked benzene sulfonamide derivatives as isoform selective inhibitors of transmembrane human carbonic anhydrases.. <i>European Journal of Medicinal Chemistry</i> , 2022 , 234, 114247	6.8	1

32	Tail-approach based design and synthesis of Arylthiazolylhydrazono-1,2,3-triazoles incorporating sulfanilamide and metanilamide as human carbonic anhydrase I, II, IV and IX inhibitors.. <i>Bioorganic Chemistry</i> , 2022 , 123, 105764	5.1	1
31	One-Pot Procedure for the Synthesis of Asymmetric Substituted Ureido Benzene Sulfonamides as Effective Inhibitors of Carbonic Anhydrase Enzymes.. <i>Journal of Medicinal Chemistry</i> , 2021 ,	8.3	1
30	Ureidosulfocoumarin Derivatives As Selective and Potent Carbonic Anhydrase IX and XII Inhibitors.. <i>ChemMedChem</i> , 2021 , e202100725	3.7	1
29	Development of Praziquantel sulphonamide derivatives as antischistosomal drugs. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022 , 37, 1479-1494	5.6	1
28	Carbonic anhydrase inhibitors for the treatment of neuropathic pain and arthritis 2019 , 367-386		0
27	Overview of carbonic anhydrase families/isoforms 2014 , 6-16		0
26	Design, synthesis and biochemical evaluation of novel carbonic anhydrase inhibitors triggered by structural knowledge on hCA VII. <i>Bioorganic and Medicinal Chemistry</i> , 2021 , 44, 116279	3.4	0
25	QM and QM/MM study on inhibition mechanism of polyphenolic compounds as non-classical inhibitors of human carbonic anhydrase (II). <i>Theoretical Chemistry Accounts</i> , 2021 , 140, 1	1.9	0
24	Benzoselenoates: A novel class of carbonic anhydrase inhibitors.. <i>Bioorganic Chemistry</i> , 2022 , 122, 105754	5.1	0
23	Heterobimetallic complexes containing organometallic acylhydrazone ligands as potential inhibitors of human carbonic anhydrases.. <i>Journal of Inorganic Biochemistry</i> , 2022 , 232, 111814	4.2	0
22	New 1H-indole-2,3-dione 3-thiosemicarbazones with 3-sulfamoylphenyl moiety as selective carbonic anhydrase inhibitors.. <i>Archiv Der Pharmazie</i> , 2022 , e2200023	4.3	0
21	Carbonic Anhydrases From Extremophiles and Their Biotechnological Applications 2015 , 311-324		
20	Carbonic anhydrase inhibitors as diuretics 2019 , 287-309		
19	Carbonic anhydrases from pathogens 2019 , 387-417		
18	Carbonic anhydrase activators and their potential in the pharmaceutical field 2019 , 477-492		
17	Biotechnologic applications of carbonic anhydrases from extremophiles 2019 , 495-514		
16	Next-generation secondary/tertiary sulfonamide carbonic anhydrase inhibitor 2014 , 52-67		
15	Nanoparticles for controlled release of anti-biofilm agents WO2014130994 (A1): a patent evaluation. <i>Expert Opinion on Therapeutic Patents</i> , 2015 , 25, 945-8	6.8	

- 14 Upcoming conferences of interest. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2012**, 27, 166-166
- 13 Nothepsin **2013**, 63-69
- 12 Aspartic proteinases from Antarctic fish. A biochemical and molecular approach. *Italian Journal of Zoology*, **2000**, 67, 21-26
- 11 Beta-Carbonic Anhydrase 1 from *Trichomonas Vaginalis* as New Antiprotozoan Drug Target. *Topics in Medicinal Chemistry*, **2021**, 1 0.4
- 10 Class Carbonic Anhydrases as Antiplasmodial Drug Targets: Current State of the Art and Hurdles to Develop New Antimalarials. *Topics in Medicinal Chemistry*, **2021**, 1 0.4
- 9 2-(2-Hydroxyethyl)piperazine derivatives as potent human carbonic anhydrase inhibitors: Synthesis, enzyme inhibition, computational studies and antiglaucoma activity.. *European Journal of Medicinal Chemistry*, **2022**, 228, 114026 6.8
- 8 Metal detoxification and homeostasis in Antarctic Notothenioids. A comparative survey on evolution, expression and functional properties of fish and mammal metallothioneins **2006**, 369-383
- 7 Carbonic Anhydrase Inhibitors: Designing Isozyme-Specific Inhibitors as Therapeutic Agents. *Progress in Drug Research Fortschritte Der Arzneimittelforschung Progres Des Recherches Pharmaceutiques*, **2021**, 221-235
- 6 Vanillin enones as selective inhibitors of the cancer associated carbonic anhydrase isoforms IX and XII. The out of the active site pocket for the design of selective inhibitors?. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2021**, 36, 2118-2127 5.6
- 5 Carbonic Anhydrase **2020**, 77-90
- 4 Next-generation dithiocarbamate carbonic anhydrase inhibitors **2014**, 114-130
- 3 A Story on Carbon Dioxide and Its Hydration **2021**, 115-131
- 2 Immobilization of carbonic anhydrase for enhancement of CO₂ reactive absorption. *New Biotechnology*, **2018**, 44, S44 6.4
- 1 Diversely substituted sulfamides for fragment-based drug discovery of carbonic anhydrase inhibitors: synthesis and inhibitory profile.. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2022**, 37, 857-865 5.6